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Surveillance for Violent Deaths — National Violent Death Reporting System, 16 States, 2006

#### MMWR

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# Surveillance for Violent Deaths — National Violent Death Reporting System, 16 States, 2006

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#### Abstract

**Problem/Condition:** An estimated 50,000 persons die annually in the United States as a result of violence-related injuries. This report summarizes data from CDC's National Violent Death Reporting System (NVDRS) regarding violent deaths from 16 U.S. states for 2006. Results are reported by sex, age group, race/ethnicity, marital status, location of injury, method of injury, circumstances of injury, and other selected characteristics.

#### Reporting Period Covered: 2006.

Description of System: NVDRS collects data regarding violent deaths obtained from death certificates, coroner/medical examiner reports, and law enforcement reports. NVDRS began operation in 2003 with seven states (Alaska, Maryland, Massachusetts, New Jersey, Oregon, South Carolina, and Virginia) participating; six states (Colorado, Georgia, North Carolina, Oklahoma, Rhode Island, and Wisconsin) joined in 2004 and four (California, Kentucky, New Mexico, and Utah) in 2005, for a total of 17 states. This report includes data from 16 states that collected statewide data; data from California are not included in this report because NVDRS has been implemented only in a limited number of California cities and counties rather than statewide.

Results: For 2006, a total of 15,007 fatal incidents involving 15,395 violent deaths occurred in the 16 NVDRS states included in this report. The majority (55.9%) of deaths were suicides, followed by homicides and deaths involving legal intervention (e.g. a suspect is killed by a law enforcement officer in the line of duty)(28.2%), violent deaths of undetermined intent (15.1%), and unintentional firearm deaths (0.7%). Suicides occurred at higher rates among males, American Indians/Alaska Natives (AI/ANs), non-Hispanic whites, and persons aged 45–54 years and occurred most often in a house or apartment and involved the use of firearms. Suicides were precipitated primarily by mental-health, intimate-partner, or physical-health problems or by a crisis during the preceding 2 weeks. Homicides occurred at higher rates among males and persons aged 20–24 years; rates were highest among non-Hispanic black males. The majority of homicides involved the use of a firearm and occurred in a house or apartment or on a street/highway. Homicides were precipitated primarily by arguments and interpersonal conflicts or in conjunction with another crime. Other manners of death and special situations or populations also are highlighted in this report.

**Interpretation:** This report provides a detailed summary of data concerning violent deaths collected by NVDRS for 2006. The results indicate that violent deaths resulting from self-inflicted or interpersonal violence affected adults aged 20–54 years, males, and certain minority populations disproportionately. For many types of violent death, relationship problems, interpersonal conflicts, mental-health problems, and recent crises were among the primary precipitating factors. Because additional information might be reported subsequently as participating states update their findings, the data provided in this report are preliminary.

Public Health Action: For the occurrence of violent deaths in the United States to be better understood and ultimately prevented, accurate, timely, and comprehensive surveillance data are necessary. NVDRS data can be used to track the

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occurrence of violence-related fatal injuries and assist public health authorities in the development, implementation, and evaluation of programs and policies to reduce and prevent violent deaths at the national, state, and local levels. The continued development and expansion of NVDRS is essential to CDC's efforts to reduce the personal, familial, and societal costs of violence. Further efforts are needed to increase the number of states participating in NVDRS, with an ultimate goal of full national representation.

#### Introduction

An estimated 50,000 persons die annually in the United States as a result of violence-related injuries. Homicide is the second leading cause of death for persons aged 15–24 years, the third leading cause for persons aged 25–34 years, and the fourth for persons aged 1–14 years. Suicide is the second leading cause of death for persons aged 25–34 years and the third leading cause for persons aged 10–24 years. Only unintentional injury, malignant neoplasms, and congenital anomalies were more common (1).

Public health authorities require accurate, timely, and comprehensive surveillance data to better understand and ultimately prevent the occurrence of violent deaths in the United States (2). In 2000, CDC started planning for the implementation of the National Violent Death Reporting System (NVDRS) (3,4). The goals of this system are to:

- collect and analyze timely, high-quality data that monitor the magnitude and characteristics of violent death at the national, state, and local levels;
- ensure that violent death data are disseminated routinely and expeditiously to public health officials, law enforcement officials, policy makers, and the public;
- ensure that data are used to develop, implement, and evaluate programs and policies that are intended to reduce and prevent violent deaths and injuries at the national, state, and local levels; and
- build and strengthen partnerships among organizations and communities at the national, state, and local levels to ensure that data are collected and used to reduce and prevent violent deaths and injuries.

NVDRS is a state-based active surveillance system that collects risk-factor data concerning all violence-related deaths, including homicides, suicides, unintentional firearm deaths, legal-intervention deaths (i.e., deaths caused by police and other persons with legal authority to use deadly force, excluding legal executions), and deaths of undetermined intent. NVDRS data are used to assist the development, implementation, and evaluation of programs and policies designed to reduce and prevent violent deaths and injuries at the national, state, and local levels.

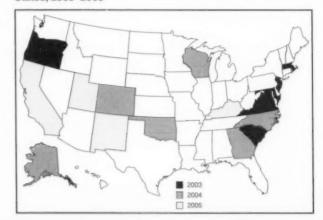
Before implementation of NVDRS, single data sources (e.g., death certificates or supplemental homicide reports) provided only limited information and few circumstances from which to understand patterns of violent death. NVDRS fills this gap in

national surveillance; it is the first system to provide detailed information on circumstances precipitating violent deaths, the first to link multiple source documents to enable researchers to understand each violent death better, and the first to link multiple violent deaths that are related to one another (e.g., multiple homicides, suicide pacts, and cases of homicide followed by the suicide of the suspected perpetrator).

NVDRS began operation in 2003 with seven states (Alaska, Maryland, Massachusetts, New Jersey, Oregon, South Carolina, and Virginia) participating; six states (Colorado, Georgia, North Carolina, Oklahoma, Rhode Island, and Wisconsin) joined in 2004 and four more (California, Kentucky, New Mexico, and Utah) in 2005, for a total of 17 states (Figure). CDC provides funding for state participation. CDC anticipates that NVDRS will expand to include all 50 states, the District of Columbia, and U.S. territories.

This report summarizes data for 2006 concerning violent deaths from 16 states that collected statewide data (approximately 26% of the U.S. population). Data from California are not included in this report because NVDRS has not been implemented statewide in California as it has in the other 16 states providing data. Because additional information might be reported subsequently as participating states update their findings, the data provided in this report are preliminary. Annual updates of NVDRS data also are available through a web-based query system (WISQARS) at http://wisqars.cdc.gov:8080/nvdrs/nvdrsDisplay.jsp.

FIGURE. States participating in the National Violent Death Reporting System, by year of initial data collection — United States, 2003–2005



## Methods

NVDRS uses multiple, complementary data sources, including death certificates, coroner/medical examiner (CME) records, and law enforcement reports. Secondary sources used by certain participating states include child fatality review team data; supplementary homicide reports; hospital data; crime laboratory data; and Bureau of Alcohol, Tobacco, Firearms, and Explosives trace information concerning firearms. NVDRS links together multiple documents for each violent death and also links multiple deaths that are related to each other (e.g., multiple homicides, a homicide followed by a suicide, or multiple suicides) into a single incident. The ability to analyze data linked in this way permits a comprehensive assessment of violent deaths.

NVDRS defines a violent death as a death resulting from the intentional use of physical force or power against one-self, another person, or a group or community. In addition, NVDRS collects information regarding unintentional firearm injury deaths (i.e., deaths resulting from incidents in which the person causing the injury did not intend to discharge the firearm). NVDRS case definitions are coded on the basis of the *International Classification of Diseases, Tenth Revision* (ICD-10) (5). Cases with selected ICD-10 codes are included in NVDRS (Box 1). ICD-10 case finding is completed by participating states.

Variables analyzed in NVDRS include the following:

- manner of death (i.e., the intent of the person inflicting a fatal injury);
- mechanism of injury (i.e., the method used to inflict a fatal injury);
- circumstances preceding injury (i.e., the precipitating events that led to the infliction of a fatal injury);
- whether the decedent was a victim (i.e., a person who died as a result of a violence-related injury);
- whether the decedent was a suspect (i.e., a person believed to have inflicted a fatal injury on a victim);
- whether the decedent was both a suspect and a victim (i.e., a person believed to have inflicted a fatal injury on a victim and then was fatally injured himself or herself);

- incident (i.e., an occurrence in which one or more persons sustained a fatal injury that was linked to a common event during a 24-hour period); and
- type of incident (i.e., a combination of the manner of death and the number of victims in an incident).

NVDRS is incident-based, and all decedents (both victims and alleged perpetrators [suspects]) associated with a given incident are grouped in one record. Decisions about whether two or more deaths are associated with the same incident are made on the basis of the timing of the injuries rather than on that of the deaths. Examples of a violent death incident include 1) a single isolated violent death, 2) two or more related homicides (including legal interventions) when the fatal injuries were inflicted <24 hours apart, 3) two or more related suicides or deaths of undetermined intent when the fatal injuries were inflicted <24 hours apart, and 4) a homicide followed by a related suicide when both fatal injuries were inflicted <24 hours apart.

Data are obtained from individual information sources and entered into source-specific computerized data entry screens (e.g., police report data are entered into police report screens and death certificate data into death certificate screens). In addition to allowing independent entry of each source, this approach permits later review of what each source contributed and identification of missing sources. This permits comparisons of the quality and completeness of state-specific data sources and allows states to provide feedback to sources regarding the consistency of their data compared with data from other sources. In addition, the system permits automatic electronic importation of specific data sources without requiring manual entry.

Abstraction of identical variables across multiple source documents can result in data inconsistencies, which NVDRS resolves by assigning a primacy (i.e., hierarchical) rule for each variable. The primacy rules are applied to create a final analysis data set that uses data from all available sources. For each variable in NVDRS, primacy is established on the basis of a hierarchy of assumed reliability of all the sources for a single variable. For example, sex is collected in all three required

BOX 1. International Classification of Diseases, Tenth Revision (ICD-10) codes used in the National Violent Death Reporting System

Manner of death	Death ≤1 year after injury	Death >1 year after injury
Intentional self-harm (suicide)	X60-X84	Y87.0
Assault (homicide)	X85-X99, Y00-Y09	Y87.1
Event of undetermined intent	Y10-Y34	Y87.2, Y89.9
Unintentional exposure to inanimate mechanical forces (firearms)	W32-W34	Y86 determined to be attributable to firearms
Legal intervention, excluding executions, Y35.5	Y35.0-Y35.4, Y35.6-Y35.7	Y89.0
Terrorism	U01, U03	U02

documents (death certificate, CME record, and police report). The primacy for sex is expressed as death certificate/CME record/police report, meaning the analysis file is constructed using the sex recorded in the death certificate; if this is left blank or is unknown, the sex recorded in the CME record is used; and, if the CME record does not provide the sex or lists the sex as unknown, the police report is used.

#### Manner of Death

A manner (i.e., intent) of death for each decedent is assigned by a trained abstractor who takes into account information from all source documents. Typically, these documents are consistent regarding the manner of death, and the abstractor-assigned manner of death corresponds to that reported in all the source documents. On rare occasions, when a discrepancy exists among the source documents, the abstractor must assign a manner of death on the basis of the preponderance of evidence in the source documents. For example, if two sources classify a death as a suicide and a third classifies it as undetermined, the death will be coded as a suicide.

NVDRS classifies data using one of five abstractor-assigned manners of death:

- Suicide. Suicide is defined as a death resulting from the use of force against oneself when a preponderance of the evidence indicates that the use of force was intentional. This category includes deaths of persons who intended only to injure rather than kill themselves, deaths associated with risk-taking behavior that is associated with a high risk for death without clear intent to inflict fatal injury (e.g., "Russian roulette") and suicides involving only passive assistance to the decedent (e.g., supplying the means or information needed to complete the act). The category does not include deaths caused by chronic or acute substance abuse without the intent to die or deaths attributed to autoerotic behavior (e.g., self-strangulation during sexual activity). Corresponding ICD-10 codes included in NVDRS are X60–X84 and Y87.0.
- Homicide. Homicide is defined as a death resulting from the use of physical force or power, threatened or actual, against another person, group, or community when a preponderance of evidence indicates that the use of force was intentional. Two special scenarios that the National Center for Health Statistics (NCHS) regards as homicides are included in the NVDRS definition: 1) arson with no intent to injure a person and 2) a stabbing with intent unspecified. This category excludes vehicular homicide without intent to injure, unintentional firearm deaths (a separate category listed below), combat deaths or acts of war, and deaths of unborn fetuses. Corresponding ICD-

10 codes included in NVDRS are X85-X99, Y00-Y09, and Y87.1.

- Unintentional firearm. The term "unintentional firearm death" is used when a death results from a penetrating injury or gunshot wound from a weapon that uses a powder charge to fire a projectile and for which a preponderance of evidence indicates that the shooting was not directed intentionally at the decedent. Examples of deaths included in this category include the death of a person as a result of celebratory firing that was not intended to frighten, control, or harm anyone; a soldier shot during a field exercise but not in a combat situation; and a person who received a self-inflicted wound while playing with a firearm. This category excludes firearm injuries caused by unintentionally striking a person with the firearm (e.g., hitting a person on the head with the firearm rather than firing a projectile) and unintentional injuries from nonpowder guns (e.g., BB, pellet, or other compressed air- or gas-powered guns). Corresponding ICD-10 codes included in NVDRS are W32-W34 and Y86 with a method of firearm.
- Undetermined intent. The term "undetermined intent" is
  used when a death results from the use of force or power
  against oneself or another person for which the evidence
  indicating one manner of death is no more compelling
  than evidence indicating another. This category includes
  CME rulings such as "accident or suicide," "undetermined," "jumped or fell," and self-inflicted injuries when
  records give no evidence or opinions in favor of either
  unintentional or intentional injury. Corresponding
  ICD-10 codes included in NVDRS are Y10–Y34, Y87.2,
  and Y89.9.
- Legal intervention. The term "legal intervention" is used when a decedent is killed by a police officer or other peace officer (a person with specified legal authority to use deadly force), including military police, acting in the line of duty. This category excludes legal executions. Corresponding ICD-10 codes included in NVDRS are Y35.0–Y35.4, Y35.6, Y35.7, and Y89.0.

## **Variables Analyzed**

NVDRS collects approximately 250 unique variables (available at http://www.cdc.gov/ncipc/profiles/nvdrs/default.htm); the number of variables recorded for each incident depends on the content and completeness of the source documents. Variables include manner of death, demographics, ICD-10 and underlying cause-of-death codes and text, location and date/time of injury and death, toxicology results, bodily injuries, precipitating circumstances, decedent-suspect relationship, and method of injury (Boxes 2 and 3).

# BOX 2. Methods of injury — National Violent Death Reporting System, 16 states, 2006

- Firearm: method that uses a powder charge to fire a projectile.
- Sharp instrument: knife, razor, machete, pointed instrument (e.g., chisel or broken glass).
- Blunt instrument: club, bat, rock, or brick.
- Poisoning: street drug, alcohol, pharmaceutical, carbon monoxide, gas, rat poison, or insecticide.
- Hanging/strangulation/suffocation: hanging by the neck, manual strangulation, or plastic bag over the head.
- · Personal weapons: hands, fists, or feet.
- Fall: being pushed or jumping.
- Drowning: inhalation of liquid in bathtub, lake, or other source of water/liquid.
- Fire/burn: inhalation of smoke or the direct effects of fire or chemical burns.
- · Shaking: shaking a baby, child, or adult.
- · Motor vehicle: car, bus, or motorcycle.
- Other transport vehicle: train or airplane.
- Intentional neglect: starvation, lack of adequate supervision, or withholding of health care.
- · Other: any method other than those listed above.
- · Unknown: method not reported or not known.

## Comparability of 2005 and 2006 NVDRS Surveillance Summary Data

Four changes were made to how variables were reported between 2005 and 2006 that affect their comparability. Those changes involve race/ethnicity, location of injury, relationship of victim to suspect, and method of injury. In 2005, the race variable was reported in six categories (white, black, Asian Pacific Islander (API), AI/AN, other, and unknown). Ethnicity was categorized separately as persons of any race that reported Hispanic origin. When this methodology was used, Hispanics were reported both within their race category and then again separately by ethnicity. The 2006 methodology classifies each person as non-Hispanic white, non-Hispanic black, API, AI/AN, Hispanic, other, and unknown. Race and ethnicity are combined in one variable. This change allows for better comparability with other violence-related data.

Location of injury is coded from a list of 31 location options in NVDRS. Because certain options are selected rarely, certain response categories have been combined. In 2006, the category "bank" was included in "office building" rather than in "commercial/retail area" as it was in 2005. Also in 2006, the category "synagogue/church/temple" was subsumed under "other" and not reported seperately as in 2005.

Relationship of the victim to the suspect includes a new category, "other intimate-partner involvement," to refer to a death that is intimate-partner—related but that does not occur between the intimate partners themselves (e.g., when a child is killed by a parent's partner). In addition, the categories "rival gang member" and "victim was injured by a law enforcement officer" are reported in 2006 as separate categories; in 2005, these categories were included in "other specified relationship." The categories "foster child" and "foster parent" also were moved from "other relative" to "child" and "parent," respectively.

Four new categories were added to method of injury: "firearm and poisoning," "firearm and other method type," "poisoning and other method type," and "other combination of methods." All deaths in these new categories involved more than one method, and the evidence did not indicate which method caused the fatal injury. For example, a homicide victim might have injuries from both a firearm and a sharp instrument, but the method that actually caused the fatal injury might be unclear. In this case, the method of injury would be categorized as "firearm and other method."

## **Circumstances Preceding Death**

The circumstances preceding death are defined as the precipitating events that led to the infliction of a fatal injury (Box 3). The circumstances that preceded a fatal injury are reported on the basis of the content of the CME record and police reports. Different sets of circumstances are coded for suicide/undetermined deaths, homicide/legal-intervention deaths, and unintentional firearm deaths. The variable "circumstances known" is a gateway variable to a list of potential circumstances. Each incident requires the data abstractor to code all circumstances in cases for which the circumstances are known. If circumstances are not known (e.g., for a body found in the woods with no other information available), the data abstractor leaves the gateway variable blank, and these cases are excluded from the denominator for circumstance values. If either the CME record or the police report indicates that the circumstance is reported to be true, then the abstractor enters data as confirmed (e.g., if the police report indicated that a decedent had disclosed an intent to commit suicide, then suicidal intent is accepted to be true).

# **Coding Training and Quality Control**

Coding training is held annually for all participating states. Ongoing coding support is provided through an e-mail help desk, monthly conference calls with all states, and regular conference calls with individual states. A coding manual is provided. Software features enhance coding reliability, including

#### BOX 3. Circumstances preceding fatal injury, by manner of death — National Violent Death Reporting System, 16 states, 2006

#### Suicide/Undetermined Intent

- Current depressed mood: decedent was perceived by self or others to be depressed.
- Current mental health problem: decedent has been identified as having a mental health disorder or syndrome listed in the Diagnostic and Statistical Manual, Version IV (DSM-IV).
- First/second type of mental illness diagnosis: identifies the DSM-IV diagnosis made by a medical or mental health practitioner.
- Current treatment for mental illness: decedent was currently receiving mental health treatment as evidenced by
  a current psychotropic medication or visit to a mental
  health professional in the previous 2 months.
- Alcohol/other substance problem: decedent was perceived by self or others to have a problem with, or to be addicted to, alcohol or other drugs.
- Person left a suicide note: decedent left a note, e-mail message, video, or other communication indicating an intent to die by suicide.
- Disclosed intent to die by suicide: decedent had previously expressed suicidal feelings to another person with time for that person to intervene; disclosure only at the time of the event, with no opportunity to intervene, is not coded as "disclosed intent to commit suicide."
- History of suicide attempts: decedent was known to have made previous attempts, regardless of the severity of those attempts.
- Crisis during previous 2 weeks: a very current crisis or acute precipitating event appears to have contributed to the suicide. This is designed to measure impulsivity. The crisis event must have occurred in the previous 2 weeks or be impending in the following 2 weeks (e.g., a trial for a criminal offense begins the following week).
- Physical health problem: decedent was experiencing physical health problems that are believed to have contributed to the suicide (e.g., a recent cancer diagnosis or chronic pain).
- Intimate partner problem: problems with a current or former intimate partner that appear to have contributed to the suicide.
- Other relationship problem: problems with a family member, friend, or associate (other than an intimate partner) that appear to have contributed to the suicide.
- Job problem: decedent was either experiencing a problem at work or was having a problem with joblessness.
- School problem: decedent was experiencing a problem such as poor grades, bullying, social exclusion at school, or performance pressures.

- Financial problem: decedent was experiencing problems such as bankruptcy, overwhelming debt, or foreclosure of a home or business.
- Suicide of friend or family in previous 5 years: decedent was distraught over, or reacting to, a relatively recent suicide of a friend or family member.
- Other death of friend or family in previous 5 years: decedent was distraught over, or reacting to, a relatively recent nonsuicide death of a friend or family member.
- Recent criminal legal problem: decedent was facing criminal legal problems that appear to be associated with the suicide.
- Other legal problem: decedent was facing civil legal problems (e.g., a child custody or civil lawsuit).
- Perpetrator of interpersonal violence in previous month: decedent perpetrated interpersonal violence (e.g., being sought by police for assault or having been issued a restraining order resulting from recent violence) during the previous month.
- Victim of interpersonal violence in previous month: decedent was the target of interpersonal violence in the past month.

#### Homicide/Legal Intervention

- Precipitated by another crime: incident occurred as the result of another serious crime.
- Nature of crime: identifies the actual crime (e.g., robbery or drug trafficking).
- Crime in progress: crime was in progress at the time of the death.
- Argument over money/property: conflict between decedent and suspect was over money or property (including drugs).
- Other argument, abuse, conflict: conflict between decedent and suspect was over something other than money, property, or drugs.
- Jealousy ("lover's triangle"): jealousy or distress over an intimate partner's relationship or suspected relationship with another person led to the homicide.
- Intimate-partner violence—related: homicide is related to conflict between current or former intimate partners; includes the death of actual intimate partners and nonintimate partner decedents killed to cause pain to an intimate partner (e.g., child or parent).
- Drug involvement: drug dealing or illegal drug use is suspected to have played a role in precipitating the homicide.
- Gang-related: homicide is suspected to have resulted from gang activity or gang rivalry; not used if the decedent was a gang member but the homicide did not appear to result from gang activity.

# BOX 3. (Continued) Circumstances preceding fatal injury, by manner of death — National Violent Death Reporting System, 16 states, 2006

- Hate crime: decedent was intentionally selected because of his/her actual or perceived gender, religion, sexual orientation, race/ethnicity, or disability.
- Brawl: mutual physical fight involving three or more persons.
- Decedent was a bystander: decedent was not directly involved in the incident.
- Decedent was a police officer on duty: a law enforcement officer killed in the line of duty.
- Decedent was an intervener assisting a crime victim: decedent was attempting to assist a crime victim at the time of the incident (e.g., a child attempts to intervene and is killed while trying to assist a parent who is being assaulted).
- Mercy killing: the decedent wished to die because of terminal or hopeless disease or condition, and documentation indicates that the decedent wanted to be killed.

#### **Unintentional Firearm Death**

- Hunting: death occurred anytime after leaving home for a hunting trip and before returning home from a hunting trip; the shooting need not have been during an active hunt to be coded.
- Target shooting: a shooter was aiming for a target and unintentionally hit a person; can be at a shooting range or an informal backyard setting.
- Self-defensive shooting: self-inflicted shooting in which the decedent was attempting to use a gun in self-defense.
- Celebratory firing: shooter fired the gun upward in a celebratory manner with no intention of threatening or endangering others.

- Loading/unloading gun: firearm discharged when the shooter was loading/unloading ammunition.
- Cleaning gun: firearm discharged when the shooter was cleaning the gun.
- Showing gun to others: showing the gun to another person when the gun discharged or the trigger was pulled.
- Playing with gun: the shooter and one or more others were playing with a gun.
- Thought safety was engaged: shooter thought the gun was inoperable because the safety was engaged.
- Thought unloaded/magazine disengaged: shooter thought the gun was unloaded because the magazine was disengaged.
- Thought gun was unloaded/other: shooter thought the gun was unloaded for other unspecified reason.
- Unintentionally pulled trigger: shooter unintentionally pulled the trigger (e.g., while grabbing the gun or holding it too tightly).
- Bullet ricochet: bullet ricocheted from its intended target and unintentionally struck the decedent.
- Gun defect or malfunction: gun had a defect or malfunctioned as determined by a trained firearm examiner.
- Fired while holstering/unholstering: gun was being replaced or removed from holster/clothing.
- Dropped gun: gun discharged when it was dropped or when something was dropped on it.
- Fired while operating safety/lock: shooter unintentionally fired the gun while operating the safety lock.
- Gun mistaken for toy: gun was mistaken for a toy and was fired without the user understanding the danger.

automated validation rules and a hover-over feature containing variable-specific information. Details regarding NVDRS procedures and coding are available at http://www.cdc.gov/ncipc/profiles/nvdrs/publications.htm.

States are requested to perform blind reabstraction of cases using multiple abstractors to identify inconsistencies. CDC also runs a quality-control analysis in which multiple variables are reviewed for their appropriateness, with special focus on abstractor-assigned variables such as method selection and manner of death. If CDC questions any variable, CDC notifies the state and asks for a response or correction.

# Time Frame

States are required to report all deaths within 6 months of the end of each calendar year for the preceding January—December time frame. States then have an additional 12 months to com-

plete each incident record. Although states typically meet these timelines, additional details sometimes arrive after a deadline has passed. New incidents also might be identified after the deadline (e.g., if a death certificate is revised, new evidence is obtained that changes a manner of death, or a miscoded ICD-10 is corrected to meet NVDRS inclusion criteria). These additional data are incorporated into NVDRS. Analysis files are updated monthly at CDC. On the basis of previous experience, CDC estimates that case counts might increase 1%–2% after the initial 18-month data collection period.

# Fatal Violent Injuries During 2006

This report provides preliminary data concerning fatal violent injuries in 2006 for 16 participating states that were received by CDC as of July 31, 2008. Data from California were not included in this report because NVDRS was implemented only

in a limited number of cities and counties rather than statewide. Participating states used vital statistics death certificate files to identify violent deaths meeting NVDRS case definitions. Each state reported all violent deaths of their residents that occurred within the state and deaths of state residents that occurred elsewhere. Once a death was identified, NVDRS data abstractors linked source documents, linked violent deaths within each incident, coded data elements, and wrote a short narrative of the incident. These narratives were reviewed for all incidents in which coded data were unclear or incomplete. State-level data then were consolidated and analyzed for this aggregate report. Numbers, percentages, and crude rates are presented in aggregate for all violent deaths by abstractor-assigned manner of death and for special situations and populations (e.g., homicide followed by suicide, suicides of former or current military personnel, and intimate-partner-related homicides). Rates for cells with a frequency of <20 are not reported because of the instability of those rates. In addition, rates could not be calculated for variables such as marital status and precipitating circumstances because denominators were unknown. Bridgedrace 2006 population estimates were used as denominators in the rate calculations (6). For compatible numerators for rate calculations to be derived, person records listing multiple races were recoded to a single race when possible, using a bridging algorithm provided by NCHS (available at http://www.cdc. gov/nchs/about/major/dvs/popbridge/popbridge.htm).

#### Results

#### **All Violent Deaths**

# Violent Deaths by Manner, Method, and Location

The 16 NVDRS states included in this report collected data concerning 15,007 violent death incidents and 15,395 deaths that occurred during 2006. The crude (i.e., not adjusted for age) rate of violent death was 19.5 deaths per 100,000 population. Suicides (n = 8,599) accounted for the highest rate of violent death (10.9 per 100,000 population) followed by homicide/legal-intervention deaths (n = 4,343; rate: 5.5 deaths per 100,000 population). Deaths of undetermined intent (n = 2,332) and unintentional firearm deaths (n = 101)occurred at lower rates (3.0 and 0.1 deaths per 100,000 population, respectively). Of all violent deaths occurring in 2006 in the 16 states included in this report, the great majority (97.8%) of incidents involved a single victim. Firearms accounted for 48.2% of injury deaths, poisoning for 20.4%, and hanging/strangulation/suffocation for 13.3% (rates: 9.4, 4.0, and 2.6 deaths per 100,000 population, respectively); rates for other methods were lower. For all violent deaths, a house or apartment was the most common location (68.8%). The next-most-common location of injury (8.6%) was a street or highway (Table 1).

#### **Toxicology Results of Decedent**

Tests for alcohol were conducted for 76.1% of decedents, and drug tests for amphetamines, antidepressants, cocaine, marijuana, and opiates were conducted for 51.2%, 45.0%, 58.2%, 36.1%, and 56.9% of decedents, respectively. Among decedents who tested positive for alcohol (32.2%), 54.2% had a blood alcohol concentration (BAC) of >0.08 mg/dL (the legal limit in the majority of states). Opiates, including heroin and prescription pain killers, were identified in 24.5% of cases tested for these substances, antidepressants in 21.5%, cocaine in 15.6%, marijuana in 11.9%, and amphetamines in 4.7% (Table 2).

#### **Suicides**

# Sex, Race/Ethnicity, Age Group, and Marital Status

The 16 NVDRS states included in this report collected data concerning 8,593 fatal suicide incidents and 8,599 suicides that occurred during 2006. Rates of suicide by month showed little variation throughout the year (range: 0.8-1.0 deaths per 100,000 population) (Table 3). Overall, the crude suicide rate was 10.9 per 100,000 population. The rate for males was nearly four times that for females (17.3 and 4.7 deaths per 100,000 population, respectively). Non-Hispanic whites accounted for the largest number of suicide deaths, and AI/ANs and non-Hispanic whites had the highest rates of suicide (14.8 and 13.1 deaths per 100,000 population, respectively). The highest rates of suicide by age group occurred among persons aged 45-54 years and 35-44 years (17.1 and 15.3 deaths per 100,000 population, respectively). Children aged 10-14 years had the lowest rates of suicide among all age groups (1.1 deaths per 100,000 population). Rates of suicide among adolescents aged 15-19 years (6.9 deaths per 100,000 population) were approximately half those for persons aged >19 years (Table 4).

Males aged 35–64 years accounted for 55.6% of suicide deaths. Rates among males were highest for those aged ≥85 years followed by those aged 75–84 years (38.6 and 27.3 deaths per 100,000 population, respectively). AI/AN males had the highest rates of any racial/ethnic population and had rates that were more than three times the rate for API males. Among females, decedents aged 35–64 years accounted for 65.5% of suicides. Rates for females peaked at 8.8 deaths per 100,000 among those aged 45–54 years. As with males, suicide rates were highest among AI/ANs (5.9) followed closely by

non-Hispanic whites (5.8). Among females, the lowest rates of suicide were among non-Hispanic blacks (1.3) and Hispanics (2.0). Of all decedents aged ≥18 years whose marital status was known, 38.1% were married, 28.6% never had married, and 23.5% were divorced at the time of death (Table 4).

#### Method and Location of Injury

Firearms were used in the majority (51.3%) of suicide deaths, followed by hanging/strangulation/suffocation (22.1%) and poisoning (18.4%) (Table 3). The most common method used by male suicide decedents was a firearm (56.8%) followed by hanging/strangulation/suffocation (23.4%). Among females, poisons were used most often (41.0%) followed by firearms (31.4%). The most common place of self-inflicted injury was a house or apartment (75.7%) followed by natural areas (4.2%), streets or highways (3.3%), and motor vehicles (2.8%). A total of 116 (1.3%) suicides occurred in a jail or prison setting (106 males and 10 females) (Table 5).

#### Toxicology Results of Decedent and Precipitating Circumstances

Tests for alcohol were conducted for 72.5% of suicide decedents, and drug tests for amphetamines, antidepressants, cocaine, marijuana, and opiates were conducted for 43.8%, 41.2%, 49.5%, 35.9%, and 49.9% of suicide decedents, respectively. Among suicide decedents who tested positive for alcohol (33.3%), 56.3% had a BAC of >0.08 mg/dL. Opiates, including heroin and prescription pain killers, were identified in 19.1% of cases tested for these substances; cocaine and marijuana were identified in 10.3% and 8.1% of persons tested for these substances, respectively. Of suicide decedents who were tested for antidepressants, 26.9% were positive for antidepressants at the time of their death (Table 6).

Precipitating circumstances were known for approximately 88% of suicide decedents. Overall, mental-health problems were the most commonly noted circumstance for suicide decedents, with 43.6% described as experiencing a depressed mood at the time of their deaths. Nearly as many were described as having a diagnosed mental-health problem (41.9%), although only 32.8% were receiving treatment (Table 7). Of those with a diagnosed mental disorder, 75.3% had received a diagnosis of depression/dysthymia, 13.4% of bipolar disorder, and 7.7% of an anxiety disorder (Table 8); 19.5% of suicide decedents had a history of previous suicide attempts, 29.0% had disclosed their intent before dying, and 33.0% left a suicide note (Table 7). Other than mental health conditions, circumstances noted most often were intimate-partner problems or a crisis of some kind in the preceding 2 weeks, each indicated in approximately 30% of suicides with known circumstance information. Physical-health problems also were noted in 22.0% of cases.

Similar percentages of male and female suicide decedents were observed to have a depressed mood at the time of death; however, nearly twice as many females as males had received a diagnosis of a mental-health problem (63.9% and 36.7%, respectively) or were being treated for a mental-health problem (51.1% and 27.5%, respectively). Approximately the same percentage of male and female suicide decedents experienced physical-health problems in the period before their deaths, although a higher percentage of males than females had job, financial, or criminal problems in the period preceding their deaths. Intimate-partner problems also were cited as a precipitating factor in a higher percentage of male suicides than female suicides (32.9% and 26.4%, respectively). Although occurring in only a limited percentage of cases, being a perpetrator of interpersonal violence in the month before death was more common among male suicide decedents (6.3%) than being a victim of such violence (0.3%) whereas the proportions were similar for females (1.3% and 1.1%, respectively) (Table 7).

## **Homicides**

# Sex, Race/Ethnicity, Age Group, and Marital Status

The 16 NVDRS states included in this report collected data concerning 4,138 homicide incidents and 4,335 homicides that occurred during 2006. Overall, the crude homicide rate was 5.5 deaths per 100,000 population in 2006. Rates of homicide by month showed little variation throughout the year (range: 0.3–0.5 per 100,000 population) (Table 9).

The majority (52.1%) of homicide decedents aged ≥18 years for whom marital status was known never had been married, and 23.3% were married at the time of their deaths. In 40.7% of homicides, the relation of the victim to the suspect was not known. When a suspect was identified, the suspect most often was an acquaintance or friend (15.7%), a spouse or intimate partner (10.2%), or a stranger (7.4%). Perpetrators were other relatives of the decedent in <10% of cases (Table 10).

The homicide rate for males was approximately 3.8 times that for females (8.8 and 2.3 deaths per 100,000 population, respectively). Non-Hispanic blacks accounted for the majority (52.8%) of homicide deaths and had the highest rate (18.9 deaths per 100,000 population) followed by Al/ANs (8.7) and Hispanics (6.2). Age-specific homicide rates were highest (14.4 deaths per 100,000 population) among those aged 20–24 years followed by those aged 25–29 years (11.2 deaths per 100,000 population). The rate for infants aged <1 year was approximately four times that for children aged 1–4 years (8.2 and 2.1 deaths per 100,000 population, respectively) and similar to that for adolescents aged 15–19 years (8.4 deaths per 100,000 population). Rates were lowest among children aged

5–14 years and persons aged ≥55 years. The majority (64.6%) of all male homicide decedents were aged 20–44 years; males aged 20–24 years had the highest rates of homicide (24.4 deaths per 100,000 population). For females, homicide rates were highest (7.0 deaths per 100,000 population) among infants aged <1 year (Table 11).

#### Method and Location of Injury

Firearms were used in 65.8% of homicides, followed by sharp instruments (12.1%) and blunt instruments (4.6%). No other single method was used in more than 2.7% of homicides (Table 9). Firearms were the most common method used in homicides of males (70.9%) and females (47.2%). Hanging/ strangulation/suffocation was nearly seven times more common among female homicide decedents than among males (8.0% and 1.2%, respectively). A house or apartment was the most common location of homicide for both males and females (45.1% and 73.2%, respectively). The next-most-common location of homicide for males was a street or highway (25.7%), a parking lot or public garage (4.7%), and a motor vehicle (4.6%); for females, the next-most-common locations were a street or highway (8.1%), a commercial/retail area (2.6%), a natural area (2.4%), or a parking lot or public garage (2.4%) (Table 12).

# Toxicology Results of Decedent and Precipitating Circumstances

Tests for alcohol were conducted for 80.1% of homicide decedents, and drug tests for amphetamines, antidepressants, cocaine, marijuana, and opiates were conducted for 53.6%, 39.2%, 64.2%, 34.9%, and 57.9% of homicide decedents, respectively. Among homicide decedents who tested positive for alcohol (33.6%), 51.4% had a BAC of >0.08 mg/dL. Marijuana, cocaine, and opiates were identified in 19.6%, 17.2%, and 8.2% of homicide decedents tested, respectively (Table 13).

Precipitating circumstances were identified for 70% of homicide deaths. Approximately one third of those homicides were precipitated by another crime. In 79.0% of these cases, the crime was in progress at the time of the incident (Table 14). The crime was most often robbery (37.0%), followed by assault (24.4%), burglary (9.3%), drug-related (7.9%), rape/sexual assault (4.3%), or motor-vehicle theft (4.0%) (Table 15). Other common precipitating circumstances were an argument, abuse, or conflict over something other than money or property (39.3%); drug-related (16.0%); or an argument over money or property (7.6%). In 20.1% of cases, intimate-partner violence was identified as a contributing factor. In <1% of the cases, the decedent was a police officer killed in the line of duty or an intervening person assisting a crime victim (Table 14).

An argument, abuse, or a conflict unrelated to money or property was a factor in more homicides among males than among females (43.0% and 27.1% respectively). Drug-related homicides accounted for 18.1% of male homicides and 9.0% of female homicides. Intimate-partner violence was a precipitating factor in 52.2% of female homicides but only 10.3% of male homicides. In 12.9% of male homicides, the decedent also used a weapon during the altercation, compared with 2.8% of female homicides (Table 14).

#### **Deaths of Undetermined Intent**

#### Sex, Race/Ethnicity, Age Group, and Marital Status

The 16 NVDRS states included in this report collected data concerning 2,323 violent death incidents involving 2,332 deaths during 2006 for which a determination of intent could not be made. Rates of undetermined death by month were at 0.2 or 0.3 deaths per 100,000 population throughout the year (Table 16). Overall, the crude rate of undetermined violent deaths was 3.0 per 100,000 population. Rates of undetermined death were higher among males than among females (3.8 and 2.2 deaths per 100,000 population, respectively). Although non-Hispanic whites accounted for 71.5% of undetermined deaths, rates were highest among Al/ANs and non-Hispanic blacks (5.4 and 3.7 deaths per 100,000 population, respectively). The majority (50.4%) of decedents for whom the manner of death was undetermined were aged 35-54 years. Rates were highest (20.0 deaths per 100,000 population) among infants aged < 1 year. Among decedents with an undetermined manner of death age ≥18 years for whom marital status was known, 39.3% never had been married, 27.6% were married, and 25.0% were divorced at the time of death. AI/AN males had the highest rates (6.9 deaths per 100,000 population) of undetermined death compared with males or females of any other racial/ethnic population (Table 17).

# Method and Location of Injury

The most common method of injury was poisoning (65.7%). No other known single method accounted for >2.4% of undetermined deaths. Among both males and females for which the method of injury was known, poisoning was reported for 65.1% and 66.9% of deaths, respectively. The majority of undetermined violent deaths occurred in a house or apartment, making it the most common place of injury for both males and females (72.4% and 81.6%, respectively). A street or highway was the second-most-common setting, accounting for 4.5% of deaths among males and 3.2% among females (Table 18).

# Toxicology Results of Decedent and Precipitating Circumstances

Tests for alcohol were conducted for 83.1% of decedents of undetermined intent, and drug tests for amphetamines, anti-depressants, cocaine, marijuana, and opiates were conducted for approximately 75.2%, 71.0%, 80.0%, 39.7%, and 82.2% of decedents, respectively. Among decedents who tested positive for alcohol (26.6%), 50.8% had a BAC of >0.08 mg/dL. Among decedents tested for opiates, 58.6% were positive; of those tested for cocaine, 25.8% were positive; of those tested for marijuana, 11.9% were positive; and of those tested for antidepressants, 28.1% were positive (Table 19).

Precipitating circumstances were known in approximately 70% of deaths of undetermined intent. Of those, 26.3% were related to alcohol, and 60.5% were "other substance-abuse problems" (e.g., those involving an illicit drug); Although a current depressed mood was reported for only 13.7% of decedents, 32.7% had a current mental-health problem, 25.2% were in treatment at the time of their death, 9.2% had a history of suicide attempts, 6.5% had disclosed an intent to commit suicide, and 1.9% had left a suicide note. Other circumstances noted most often were physical-health problems (32.1%), a crisis during the preceding 2 weeks (14.4%), or an intimatepartner problem (9.7%) (Table 20). Of those with a current mental-health problem, 57.1% had received a diagnosis of depression/dysthymia, 20.3% of bipolar disorder, and 11.3% of an anxiety disorder (Table 21).

A greater percentage of male than female decedents were reported to have an alcohol problem (31.3% and 17.7%, respectively) or other substance-abuse problems (64.9% and 52.9%, respectively) at the time of death. Mental-health problems were reported in a higher percentage of undetermined deaths of females than of males (47.6% and 24.0%, respectively), and a higher percentage of females were currently in treatment for a mental-health problem than males (37.1% and 18.3%, respectively) and had a history of suicide attempts (12.6% and 7.2%, respectively) (Table 20).

## **Unintentional Firearm Deaths**

# Sex, Race/Ethnicity, Age Group and Seasonality

The 16 NVDRS states included in this report collected data concerning 101 unintentional firearm deaths during 2006. Males accounted for 85.1% of decedents. The majority (74.3%) were non-Hispanic whites, followed by non-Hispanic blacks (14.9%). More than half (51.5%) of unintentional firearm fatalities occurred among persons aged 10–29 years. November had the highest percentage of unintentional deaths

(17.8%) followed by January (10.9%) and June, October, and December, each with 9.9% (Table 22).

#### Location of Injury

Approximately 73.3% of all unintentional firearm fatalities took place in a house or apartment, making it the most common place of injury for both males and females, followed by natural areas (7.9%) (Table 22).

# Context of the Injury and Associated Circumstances

Overall, unintentional firearm injury deaths occurred more commonly while victims were playing with a gun (32.5%), showing a gun to others (15.7%), hunting (13.3%), or loading or unloading a gun (13.3%). The circumstances of injury included thinking that a gun was unloaded, unintentionally pulling the trigger, and dropping a gun (25.3%, 19.3%, and 10.8%, respectively) (Table 23).

## **Special Topics**

#### **Violent Deaths with Multiple Decedents**

The 16 NVDRS states included in this report collected data concerning 331 violent incidents that resulted in multiple decedents. Firearms were the most common method (74.8%) used in violent deaths with multiple decedents, followed by sharp instruments (5.0%) and poisonings (2.9%); other combinations of mechanisms accounted for 6.3%. Of a total of 719 victims, 453 (63.0%) were males; 325 (91.6%) of 355 suspects also were males (Table 24). Non-Hispanic whites accounted for the highest percentage of decedents (50.5%), followed by non-Hispanic blacks (37.3%) and Hispanics (6.3%). Rates for decedents were highest for persons aged 20–54 years. Suspects most commonly were aged 20–54 years (Table 25).

## **Homicide Followed by Suicide**

The 16 NVDRS states included in this report collected data concerning 166 violent incidents that occurred during 2006 in which a homicide was followed by the suicide of the suspect. Of 194 homicide decedents, 141 (72.7%) were female; and 157 (94.6%) suspects who committed suicide after committing a homicide (suicide decedents) were male. Homicide rates were similar for non-Hispanic whites and non-Hispanic blacks (0.2 and 0.3 deaths per 100,000 population respectively); 66.5% of homicide decedents were non-Hispanic whites. Among suspects who killed themselves after committing a homicide, 59.0% were non-Hispanic whites, and 24.1% were non-Hispanic blacks. The highest percentages of both homicide and suicide decedents were aged 35–54 years (33.0% and 51.2%, respectively) (Table 26).

The majority of homicide decedents and suspects (47.9% and 32.5%, respectively) were married at the time of death (not necessarily to each other) (Table 26). With respect to location, 83.0% of the homicides occurred in a house or apartment, 2.1% in a parking lot/public garage, 2.6% in a natural area, and 2.1% on streets or highways. Firearms were the most common (82.0%) method used by suspects both in committing the homicide and in subsequently committing suicide (Table 27).

Tests for alcohol were conducted for 76.8% of homicide decedents and 80.1% of suicide decedents. Among decedents who tested positive for alcohol (10.7% of homicide victims; 27.1% of suicide decedents), 26.7% of homicide decedents and 41.7% of suicide decedents had a BAC of >0.08 mg/dL at the time of death. Suspects who killed themselves following a homicide and who were tested subsequently for drugs had higher percentages of positive tests for antidepressants, cocaine, marijuana, and opiates than homicide victims (Table 28).

Although 12.3% of persons who committed suicide following a homicide had a current depressed mood, only 3.1% were receiving mental-health treatment at the time of the fatal incident. Intimate-partner-relationship problems preceded homicide followed by suicide in 73.0% of suspect suicides. Other nonintimate-partner-relationship problems contributed to 17.8% of suspect suicides. Of suspects who killed themselves, 87.7% had had a personal crisis within the preceding 2 weeks. Previous criminal legal problems were noted in 20.3% of suspect suicides and noncriminal problems in 3.1%; physical health or financial problems were contributing circumstances in 4.9% and 9.2% of suspect suicides respectively; 11.7% of suicide decedents had disclosed their intent to kill themselves; and 3.1% had a history of suicide attempts (Table 29).

#### **Intimate-Partner Homicide**

The 16 NVDRS states included in this report collected data concerning 559 incidents comprising 616 deaths of intimatepartner-related homicide that occurred during 2006. Of 616 homicide victims, 370 (60.1%) were female. Although 51.0% of homicide victims were non-Hispanic whites, rates were higher for AI/ANs and non-Hispanic blacks (2.3 and 1.8 per 100,000 population, respectively). Of 583 suspects, 454 (77.9%) were male; 217 (37.2%) were non-Hispanic whites and 203 (34.8%) non-Hispanic blacks. The highest percentages of victims and suspects (26.8% and 24.7%, respectively) were persons aged 35-44 years. The highest percentage (43.8%) of victims were married at the time of death (Table 30). Tests for alcohol were conducted for 79.4% of victims. Of the 30.1% of decedents who tested positive for alcohol, 59.9% had a BAC of >0.08 mg/dL. The percentage of victims tested for substances other than alcohol varied (range: 34.3%-56.2%) for various

drugs; cocaine and marijuana were evident in approximately 13% of victims tested for these substances (Table 31).

#### Suicide of Former or Current Military Personnel

The 16 NVDRS states included in this report collected data concerning 1,596 suicides by former or current military personnel that occurred during 2006. Of these 1,596 suicide decedents, 1,547 (96.9%) were male, and 1,451 (90.9%) were non-Hispanic whites. The greatest percentage of decedents were persons aged >45 years. The most common method (68.7%) used was a firearm followed by hanging/strangulation/suffocation (13.0%) and poisoning (12.0%) (Table 32). Among the 69.2% of former or current military personnel suicide decedents who were tested for alcohol, 30.5% tested positive; 60.2% of these decedents had a BAC of >0.08 mg/dL (Table 33). Although 46.9% were depressed at the time of death, and 36.6% had a diagnosed mental-health problem, only 28.3% were receiving mental-health treatment. With respect to substance abuse, 16.0% had an alcohol problem, and 7.3% had a problem with other substances. With respect to other difficulties: 24.9% had experienced a problem with an intimate partner, 39.7% had a physical-health problem, and 27.8% had experienced an acute crisis during the preceding 2 weeks. With respect to life stressors, 10.4% had experienced a job problem, 12.4% a financial problem, and 7.5% a criminal legal problem. Approximately one third (36.6%) left a suicide note, 12.9% had made a previous suicide attempt, and 27.4% had disclosed an intent to commit suicide (Table 34).

#### **Legal Intervention**

The 16 NVDRS states included in this report collected data on 173 legal-intervention incidents resulting in 174 deaths in 2006. Of the 174 decedents, 50.6% were non-Hispanic whites and 35.1% were non-Hispanic blacks. With respect to location, 44.8% of legal-intervention deaths occurred in a house or apartment, 24.1% on a street or highway, and 6.3% in a parking lot or public garage (Table 35). The majority of decedents were aged 20-54 years (Table 36). Of the 86.2% of legal-intervention decedents tested for alcohol, 38.7% were positive for alcohol and 62.1% of these decedents had a BAC of >0.08 mg/dL. The percentage of victims tested for other substances varied (range: 38.5%-72.4%). The presence of other drugs for which tests were positive also varied: 26.2% of decedents tested for cocaine, 18.3% of those tested for marijuana, 13.4% of those tested for antidepressants, 11.4% of those tested for amphetamines, and 9.2% of those tested for opiates were positive for these substances (Table 37).

### Suicide Among Persons Aged >50 Years

In 2006, NVDRS collected data for 3,300 persons aged >50 years who died by suicide. Of those, 1,658 (50.2%) were aged 50–59 years (16.0 per 100,000 population), 783 (23.7%) were aged 60–69 years (12.5 per 100,000), 481 (14.6%) were aged 70–79 years (11.9 per 100,000), and 378 (11.5%) were aged ≥80 years (14.1 per 100,000 population). Among persons aged >50 years, rates were four times higher among males than among females (24.0 and 5.8 per 100,000 population, respectively). Rates were highest among non-Hispanic whites (16.2 per 100,000 population), followed by AI/ANs (11.3 per 100,000 population), APIs (8.0), Hispanics (5.9), and non-Hispanic blacks (4.3). At the time of death, persons aged 50–69 years most often were either married or divorced and those aged 70–79 years and those aged ≥80 years most often were either married or widowed (Table 38).

The majority (79.6%) of suicide decedents aged >50 years died in a house or apartment. The second-most-common place for all age groups except those aged ≥80 years was a natural area (4.2%, 3.8%, and 3.7% for those aged 50–59, 60–69, and 70–79 years, respectively). The second-most-common location for those aged ≥80 years was a hospital/medical facility (1.9%), followed by a park, playground, or sports/athletic area (1.6%). As to method used by suicide decedents aged >50 years, firearms accounted for 61.1% of deaths (rate: 8.6 deaths per 100,000 population), poisoning for 18.2% (2.6 deaths per 100,000 population), and hanging/strangulation/ suffocation for 12.2% (1.7 deaths per 100,000 population). Rates of firearm suicide were highest among persons aged ≥80 years (10.1 deaths er 100,000) and those aged 70–79 years (9.0 per deaths 100,000 population) (Table 38).

Precipitating circumstances were identified for approximately 90% of older adult suicides. Current depressed mood (45.8%), current mental-health problem (41.7%), and physical-health problems (40.2%) were the most commonly identified circumstances; 36% left a suicide note, and 26.5% disclosed their intent to commit suicide (Table 39).

## Discussion

The findings in this report indicate clear variations in patterns of death from violence-related injuries reported from the 16 states included in this report. Rates for violent death were disproportionately higher among males, younger adults (with the exception of suicides), and minority populations. A residence (house or apartment) was the most common location for all injury deaths. Of all incidents of violent deaths occurring in 2006 in the 16 states included in this report, 97.8% involved a single victim.

#### **Suicide Patterns**

Suicide rates were higher among AI/ANs and non-Hispanic whites than among non-Hispanic blacks and highest among persons aged 45-54 years. These findings are similar to those that have been documented in other reports (7-9), with the exception of age. For example, overall rates of suicide in the United States are highest among persons aged ≥80 years (1). However, the specific age patterns for males and females in this report were similar to those reported elsewhere (1,7). The overall high rates of suicide among persons aged 45-54 years might be related, in part, to the fact that NVDRS states include four states (Alaska, Colorado, New Mexico, and Oregon) with some of the highest rates of suicide in this age group in the United States (1). However, problems related to mental health, jobs, finances, or relationships also might have contributed to the high rates of suicide in this age group. Current mental health and/or substance-abuse problems, relationship problems and losses, and recent crises were frequent precipitants for suicide. These factors have been documented in other studies as important risk factors for suicide (8,10).

Despite the high prevalence of mental-health problems among suicide decedents, only one third of such decedents were known to be receiving treatment at the time of death. Whether the lack of treatment is related to limited access to care or an unwillingness or inability to seek care is unknown. Persons might be unwilling to seek care because of the stigma attached to mental-health problems or severe mental illness affecting their capacity to make treatment decisions. Barriers in accessing mental-health treatment and stigma are both contributing factors in cases of suicide (8,10).

Alcohol was a factor in approximately one third of the reported suicides, and 56.3% of these decedents had a BAC of >0.08 mg/dL at the time of death. Alcohol and drug abuse in persons with and without affective mood disorders both are associated with suicidal behavior (11,12). However, the relation is complex; for example, alcohol abuse might lead directly to depression or indirectly through the sense of decline and failure that is experienced by the majority of persons who are dependent on alcohol. Alcohol also might be a form of self-medication to alleviate depression. Both depression and alcohol abuse also might be the result of specific stresses in a person's life (13).

Approximately 30% of suicide victims had disclosed their intent to commit suicide, and approximately 20% had made a previous suicide attempt. A previous suicide attempt is an important predictor of subsequent fatal suicidal behavior (8,13). Disclosure of intent also is an important warning sign of suicidal intentions, although persons in close contact with

potential victims of suicide often are unaware of the significance of these warnings or unsure how to act on them (14).

A unique feature of NVDRS is that it permits examination of violent deaths involving specific populations. Military personnel (former or current) were one of the special populations included in this report. The findings for suicide revealed similar precipitating circumstances among this population compared with those among all other male suicide decedents, with one exception. The proportion of former or current military personnel reported to be experiencing health problems was nearly double that for nonmilitary personnel. This might reflect a difference in reporting and contact with health-care professionals related to their military personnel status. In >40% of suicides, physical illness is considered a contributory factor, especially if mood disorders or depressive symptoms also are present (13).

#### **Homicide Patterns**

Homicide rates were higher among males than among females, among non-Hispanic blacks compared with members of other racial/ethnic populations, and among persons aged 20–24 years compared with persons in other age groups. These findings also are consistent with patterns documented in other reports. Homicide is the second leading cause of death in the United States among persons aged 10–24 years, and rates among non-Hispanic blacks in this age group exceed those of other racial/ethnic populations by approximately fourfold to sevenfold (1). Males also are disproportionately represented among victims of homicide in the United States and elsewhere (1,15).

The majority of homicides involved a single victim. Multiple decedent homicides and homicide-suicide incidents accounted for <3% of violent deaths. The majority of homicides were related to interpersonal conflicts. Crime was a factor in approximately one third of all homicide/legal-intervention deaths. These findings also are consistent with other research on homicide. Arguments and conflicts are immediate motivations for the majority of both male and female homicides in the United States (16). One factor that distinguishes male from female homicides is the relationship between the victim and the perpetrator. In the United States, approximately one in three homicides of females is committed by a current or former spouse or partner (17). Among male homicide victims, approximately 5% are killed by intimate partners. The findings of this report indicate that male homicide decedents mostly were killed following arguments or conflicts with persons other than an intimate partner or for other reasons, whereas more than half of homicides involving a female victim involved intimate-partner-related violence.

As with suicide decedents, alcohol was present in approximately one third of homicide decedents; approximately half of these decedents had BACs of >0.08 mg/dL. Alcohol is an important situational factor in interpersonal violence. In the case of interpersonal violence among youths, excessive alcohol consumption might increase impulsivity and make some drinkers resort more often to violence in a confrontation or argument (18,19). Reduced physical control and the ability to assess risks in potentially dangerous situations also can make some drinkers more vulnerable to victimization (18,19). In the case of intimate-partner violence, excessive alcohol consumption by one or both partners might exacerbate financial or child care problems or other family stressors and increase tension and conflict in the relationship (20). Alcohol also can be a form of self-medication to cope with previous or current experiences of abuse (20).

March 20, 2009

# Method of Injury

Approximately two thirds of all homicides and approximately one half of all suicides in the United States are committed with a firearm (1). In the 16 states included in this report, firearms were the most common method used in homicides, incidents involving multiple victims, and incidents of homicide followed by suicide. Previous research indicates that interpersonal disputes can escalate and cause serious violent injury or death, especially when weapons of lethal means (e.g., firearms) are involved in the dispute (21,22). Firearms also were the most common method used in suicides, although methods differed by sex. Firearms were the most common method used by males to complete suicide followed by hanging/strangulation/suffocation. Poisoning was the most common method used by females, followed closely by firearms.

The majority of deaths with undetermined intent were the result of poisonings or had an unknown cause. Poisoning was the most common method for both males and females. Toxicology results documented a high prevalence of alcohol and other substances at the time of death. For example, approximately 80% of decedents with undetermined intent were tested for opiates, and nearly 59% tested positive for these substances. Whether these deaths were related to unintentional drug poisonings (which have increased substantially in recent years, particularly among adults aged 35-54 years [23,24]) or were suicides is unknown. The majority (59.6%) of decedents in the 16 states discussed in this report were aged 35-54 years. Substance-abuse problems involving drugs other than alcohol were the most commonly noted circumstance; approximately one third of such decedents had a current mental-health problem, and nearly 10% had a history of suicide attempts.

# **Prevention Opportunities**

Many prevention opportunities are available to reduce violent deaths that are common across types of violence. Risk and protective factors for interpersonal and self-directed violence operate at multiple levels of social influence (15). Prevention programs can benefit from considering both the best way to address individual-level factors and the factors within families, peer groups, schools, or communities that contribute to violent behavior. In general, prevention approaches that address multiple domains of influence on behavior are more likely to have a preventive impact than those that focus on a single risk factor (25).

Information concerning the precipitating circumstances in violent deaths described in this report provides some important clues regarding where to focus prevention efforts. For example, relationship problems, interpersonal conflicts, and recent crises were important precipitating factors for both homicide and suicide. Intimate-partner-related problems, in particular, were a factor in many types of violent death. Programs designed to enhance social problem-solving and coping skills to deal with stressful life events, health and financial problems, or other problems that occur within interpersonal relationships can potentially reduce violence (26). In addition to demonstrating the need to address situational stressors, the findings in this report underscore the importance of changing cultural and social norms (e.g., attitudes toward the use of violence as a means of resolving conflict), addressing the social and economic conditions within communities that often give rise to violence (e.g., social isolation, lack of connectedness, and unemployment), and intervening much earlier by teaching young persons the skills to develop and promote nonviolent interpersonal relationships. Some of the strategies that offer the strongest evidence of effectiveness with respect to the latter are primary prevention strategies that focus on family environments, school environments, and building individual social, emotional, and behavioral competencies (26-29).

Substance abuse, especially alcohol, was also an important contributing factor in cases of homicide and suicide. This finding underscores the need for primary prevention efforts aimed at preventing substance abuse, such as family, school, and community-based approaches, and programs and policies aimed at increasing the accessibility of treatment for those with substance-abuse problems.

Approximately one third of the suicide decedents had disclosed their intent to commit suicide, and one in five had made a previous attempt. Mental-health problems also were highly prevalent among suicide decedents, yet many were not known to be receiving treatment at the time of death. These results underscore the importance of knowing the signs and

symptoms of suicidal behavior, reaching out to those with problems, reducing the stigma of mental illness, and increasing the accessibility of treatment.

#### Limitations

The findings provided in this report are subject to at least seven limitations. First, the availability, completeness, and timeliness of data are dependent on the sharing of data among state health department NVDRS teams, CMEs, and law enforcement personnel in their states. This is particularly challenging when states have independent county coroner systems rather than a centralized CME system. NVDRS incident data might be limited or incomplete for areas in which these data-sharing relations are not developed fully. Second, toxicology data are not collected consistently across all states or for all alcohol and drug categories. The percentage of decedents testing positive might be affected by selective testing biases in medical examiner or coroner offices (30). Third, abstractors are limited to the data included in the reports they receive. Reports might not fully reflect all information known about an incident, particularly in the case of homicides, when data are less readily available until after prosecutions are complete. Fourth, case definitions present challenges when a single death is classified differently in different documents (e.g., "unintentional" in a police report, "homicide" in a CME report, and "undetermined" on the death certificate). NVDRS abstractors reconcile these cases using standardized NVDRS case definitions and select a single manner of death on the basis of all source documents. Fifth, NVDRS data are available only from a limited number of states and therefore are not nationally representative. Sixth, although extensive coding training is conducted and help desk support is available daily, variations in coding might occur depending on the abstractor's level of experience. For this reason, states regularly conduct blinded reabstraction of cases to test consistency and identify training needs. Finally, protective factor data (i.e., characteristics or circumstances that reduce the risk for violent death) are not collected by NVDRS as a result of the nature of death certificate, CME record, and police reports, which typically contain only circumstances associated with risk factors.

# Conclusion

Accurate, timely, and comprehensive surveillance data such as those in NVDRS (31,32) can be used to track the occurrence of violence-related fatal injuries and assist public health and other authorities in the development, implementation, and evaluation of programs and policies that reduce and prevent violent deaths and injuries at the national, state, and local

levels. Continued development and expansion of NVDRS is critical to CDC, the public health community, and state and local efforts to reduce the personal, familial, and societal costs of violence. Further efforts are needed to increase the number of states participating in NVDRS, with the ultimate goal of full national representation, including all 50 states, the District of Columbia, and U.S. territories. Additional information regarding NVDRS is available at http://www.cdc.gov/ncipc/dvp/NVDRS/nvdrs\_aag\_2008-a.pdf.

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TABLE 1. Number,\* percentage,† and rate§ of incidents of violent death, by manner of death, incident type, method used, and location in which injury occurred — National Violent Death Reporting System, 16 states,¶ 2006

Characteristic	No.	%	Rate
Manner of death			-
Homicide/Legal intervention	4,343	28.2	5.5
Suicide	8,599	55.9	10.9
Undetermined intent	2,332	15.1	3.0
Unintentional firearm	101	0.7	0.1
Unknown	20	0.1	0
Total	15,395	100.0	19.5
Incident type			
Suicide, single	8,419	56.1	9.9
Homicide, single	3,657	24.4	9.9
Unintentional firearm	101	0.7	**
Suicide, multiple	6	0	**
Homicide, multiple	140	0.9	0.0
Legal intervention	166	1.1	**
Homicide followed by suicide	166	1.1	9.9
Undetermined	2,323	15.5	9.9
Other combinations of deaths	11	0.1	2.0
Unknown	18	0.1	**
Total	15,007	100.0	**
Method			
Firearm	7,426	48.2	9.4
Sharp instrument	682	4.4	0.9
Blunt instrument	243	1.6	0.3
Poisoning	3,140	20.4	4.0
Hanging/Strangulation/Suffocation	2,051	13.3	2.6
Personal weapons (hands, feet, or fists)	142	0.9	0.2
Fall	191	1.2	0.2
Drowning	154	1.0	0.2
Fire/Burns	67	0.4	0.1
Shaking	35	0.2	0
Motor vehicle††	182	1.2	0.2
Intentional neglect	6	0	55
Other (single method)	140	0.9	0.2
Firearm and poisoning <sup>¶¶</sup>	2	0	55
Firearm and other method type <sup>ff</sup>	64	0.4	0.1
Poisoning and other method type <sup>ff</sup>	75	0.5	0.1
Other combination of methods <sup>11</sup>	185	1.2	0.2
Unknown	610	4.0	1.2
Total	15,395	100.0	19.5

TABLE 1. (Continued) Number,\* percentage,† and rate§ of incidents of violent death, by manner of death, incident type, method used, and location in which injury occurred — National Violent Death Reporting System, 16 states,¶ 2006

Characteristic	No.	%	Rate
Location			
House or apartment	10,586	68.8	
Street/Highway	1,328	8.6	***
Motor vehicle	438	2.8	***
Bar/Nightclub	73	0.5	***
Commercial/Retail area	189	1.2	***
Industrial or construction area	62	0.4	***
Office building	48	0.3	***
Parking lot/Public garage	296	1.9	922
Abandoned house, building, or			
warehouse	28	0.2	***
Park, playground, or sports/athletic area	249	1.6	***
Preschool/School/College/School bus	16	0.1	***
Public transportation/Station/Railroad			
tracks	70	0.5	***
Hospital or medical facility	65	0.4	***
Supervised residential facility	91	0.6	000
Jail/Prison	147	1.0	***
Farm	56	0.4	***
Natural area	533	3.5	221
Hotel/Motel	232	1.5	000
Other	573	3.7	***
Unknown	315	2.0	***
Total	15,395	100.0	19.5

No. of victims = 15,395 (79.0%); no. of suspect/victims = 176 (0.8%); no. of live suspects = 4,069 (20.9%); no. of persons with unknown role = 22 (0.1%); and no. of incidents = 15,007.

† Percentages might not total 100% because of rounding.

§ Per 100,000 population.

Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

\*\* Because the number of victims varies in incidents involving multiple deaths, population denominators cannot be determined to compute rates.

†† Includes bus, motorcycle, or other transport vehicle.

§§ Rates not reported when number of decedents is <20.

Deaths involving more than one method and for which evidence did not indicate which method caused the fatal injury.

\*\*\* Rates not reported.

TABLE 2. Number\* and percentage of victims tested for alcohol and drugs whose results were positive, by toxicology variable—National Violent Death Reporting System, 16 states,† 2006

	Tes	ted	Positive		
Toxicology variable	No.	%	No.	%	
Blood alcohol concentration (BAC)§	11,727	76.1	3,773	32.2	
BAC ≤ 0.08 mg/dL			1,425	37.8	
BAC >0.08 mg/dL			2,043	54.2	
Alcohol-positive, level unknown			305	8.1	
Amphetamine	7,885	51.2	367	4.7	
Antidepressant	6,932	45.0	1,489	21.5	
Cocaine	8,961	58.2	1,401	15.6	
Marijuana	5,557	36.1	662	11.9	
Opiate	8,765	56.9	2,151	24.5	
Other drug(s)	7,620	49.5	3,265	42.9	

<sup>\*</sup>N = 15,395.

TABLE 3. Number,\* percentage,† and rate§ of suicides, by method used and month in which suicide occurred — National Violent Death Reporting System, 16 states,¶ 2006

Characteristic	No.	%	Rate
Method			
Firearm	4,410	51.3	5.6
Sharp instrument	148	1.7	0.2
Blunt instrument	11	0.1	9.9
Poisoning	1,580	18.4	2.0
Hanging/Strangulation/Suffocation	1,899	22.1	2.4
Fall	141	1.6	0.2
Drowning	92	1.1	0.1
Fire/Burns	34	0.4	0
Motor vehicle <sup>††</sup>	122	1.4	0.2
Other (single method)	14	0.2	0.0
Firearm and poisoning <sup>66</sup>	2	0	**
Firearm and other method type <sup>§§</sup>	10	0.1	0.0
Poisoning and other method type <sup>§§</sup>	37	0.4	0
Other combination of methods§§	28	0.3	0
Unknown	71	0.8	0.1
Total	8,599	100.0	10.9
Month			
January	734	8.5	0.9
February	643	7.5	0.8
March	720	8.4	0.9
April	721	8.4	0.9
May	799	9.3	1.0
June	718	8.3	0.9
July	768	8.9	1.0
August	726	8.4	0.9
September	671	7.8	0.8
October	691	8.0	0.9
November	699	8.1	0.9
December	690	8.0	0.9
Unknown	19	0.2	0.0
Total	8,599	100.0	10.9

<sup>\*</sup> No. of incidents = 8,593; no. of decedents = 8,599.

<sup>†</sup> Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

<sup>§</sup> BAC of >0.08 mg/dL used as standard for intoxication. Other substances indicated if any results were positive; levels for these substances are not measured.

<sup>†</sup> Percentages might not total 100% because of rounding.

<sup>§</sup> Per 100,000 population.

<sup>&</sup>lt;sup>1</sup> Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

<sup>\*\*</sup> Rates not reported when number of decedents is <20.

<sup>††</sup> Includes bus, motorcycle, or other transport vehicle.

<sup>§5</sup> Deaths involving more than one method and for which evidence did not indicate which method caused the fatal injury.

TABLE 4. Number, percentage,\* and rate† of suicides, by decedent's sex, age group, race/ethnicity, and marital status — National Violent Death Reporting System, 16 states, § 2006

		Male			Female			Total	
Characteristic	No.	%	Rate	No.	%	Rate	No.	%	Rate
Age group (yrs)									
10-14	39	0.6	1.4	21	1.1	0.8	60	0.7	1.1
15-19	311	4.6	10.9	74	3.9	2.7	385	4.5	6.9
20-24	610	9.1	21.4	105	5.6	4.0	715	8.3	13.0
25-29	545	8.1	19.5	128	6.8	4.7	673	7.8	12.2
30-34	486	7.2	18.3	135	7.2	5.2	621	7.2	11.8
35-44	1,401	20.8	23.9	404	21.5	6.8	1,805	21.0	15.3
45-54	1,465	21.8	25.8	519	27.7	8.8	1,984	23.1	17.1
55-64	873	13.0	21.4	306	16.3	7.0	1,179	13.7	13.9
65-74	483	7.2	21.5	89	4.7	3.4	572	6.7	11.7
75-84	355	5.3	27.3	75	4.0	3.9	430	5.0	13.3
>85	153	2.3	38.6	20	1.1	2.2	173	2.0	13.4
Unknown	2	0	1	0	0	1	2	0	1
Total	6,723	100.0	17.3	1,876	100.0	4.7	8,599	100.0	10.9
Race/Ethnicity									
White, non-Hispanic	5,663	65.9	20.7	1,639	19.1	5.8	7,302	84.9	13.1
Black, non-Hispanic	504	5.9	8.7	84	1.0	1.3	588	6.8	4.8
API**	101	1.2	7.3	50	0.6	3.4	151	1.8	5.3
Al/AN††	118	1.4	24.1	30	0.3	5.9	148	1.7	14.8
Hispanic	330	3.8	8.5	70	0.8	2.0	400	4.7	5.4
Other	6	0.1	0	3	0	0	9	0.1	0
Unknown	1	0	0	0	0	0	1	0	0
Total	6,723	78	17.3	1,876	22	4.7	8,599	100.0	10.9
Marital status***									
Married	2.476	37.8	111	714	39.3	111	3,190	38.1	111
Never married	2,015	30.7	111	380	20.9	111	2,395	28.6	111
Widowed	360	5.5	111	139	7.7	111	499	6.0	111
Divorced	1,444	22.0	111	524	28.9	111	1.968	23.5	111
Married but separated	60	0.9	111	13	0.7	111	73	0.9	111
Single, not otherwise specified	147	2.2	111	33	1.8	111	180	2.2	111
Unknown	55	0.8	111	12	0.7	111	67	0.8	111
Total	6.557	100.0	111	1.815	100.0	111	8.372	100.0	111

\* Percentages might not total 100% because of rounding.

† Per 100,000 population.

§ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

1 Rates not reported when number of decedents is <20.

\*\* Asian/Pacific Islander.

11 American Indian/Alaska Native.

§§ Rates not computed for "other" or "unknown" categories.

11 Includes persons of any race.

\*\*\*\* Includes only decedents aged >18 years.

††† Rates cannot be computed for marital status because denominators are unknown.

TABLE 5. Number and percentage\* of suicides, by sex of victim, method used, and location in which injury occurred — National Violent Death Reporting System, 16 states, † 2006

	M	ale	Fer	nale	Total	
Characteristic	No.	%	No.	%	No.	%
Method						
Firearm	3,821	56.8	589	31.4	4,410	51.3
Sharp instrument	117	1.7	31	1.7	148	1.7
Blunt instrument	10	0.1	1	0.1	11	0.1
Poisoning	811	12.1	769	41.0	1,580	18.4
Hanging/Strangulation/Suffocation	1,570	23.4	329	17.5	1,899	22.1
Fall	108	1.6	33	1.8	141	1.6
Drowning	61	0.9	31	1.7	92	1.1
Fire/Burns	19	0.3	15	0.8	34	0.4
Motor vehicle <sup>§</sup>	92	1.4	30	1.6	122	1.4
Other (single method)	12	0.2	2	0.1	14	0.2
Firearm and poisoning®	1	0	1	0.1	2	0
Firearm and other method type¶	10	0.1	0	0	10	0.1
Poisoning and other method type <sup>¶</sup>	15	0.2	22	1.2	37	0.4
Other combination of methods <sup>¶</sup>	24	0.4	4	0.2	28	0.3
Unknown	52	0.8	19	1.0	71	0.8
<b>Fotal</b>	6,723	100.0	1,876	100.0	8,599	100.0
Location						
House or apartment	4,993	74.3	1,514	80.7	6,507	75.7
Street/Highway	242	3.6	38	2.0	280	3.3
Motor vahicle	189	2.8	51	2.7	240	2.8
Bar/Nightclub	4	0.1	1	0.1	5	0.1
Commercial/Retail area	43	0.6	6	0.3	49	0.6
Industrial or construction area	41	0.6	2	0.1	43	0.5
Office building	26	0.4	1	0.1	27	0.3
Parking lot/Public garage	94	1.4	8	0.4	102	1.2
Abandoned house, building, or warehouse	8	0.1	0	0	8	0.1
Park, playground, or sports/athletic area	117	1.7	27	1.4	144	1.7
Preschool/School/College/School bus	6	0.1	4	0.2	10	0.1
Public transportation/Station/Railroad tracks	47	0.7	11	0.6	58	0.7
Hospital or medical facility	30	0.4	11	0.6	41	0.5
Supervised residential facility	30	0.4	4	0.2	34	0.4
Jail/Prison	106	1.6	10	0.5	116	1.3
Farm	40	0.6	8	0.4	48	0.6
Natural area	301	4.5	59	3.1	360	4.2
Hotel/Motel	101	1.5	47	2.5	148	1.7
Other	227	3.4	42	2.2	269	3.1
Unknown	78	1.2	32	1.7	110	1.3
Total	6,723	100.0	1,876	100.0	8,599	100.0

\* Percentages might not total 100% because of rounding.

† Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

§ Includes bus, motorcycle, or other transport vehicle.

Deaths involving more than one method and for which evidence did not indicate which method caused the fatal injury.

TABLE 6. Number\* and percentage of suicide victims tested for alcohol and drugs whose results were positive, by toxicology variable — National Violent Death Reporting System, 16 states,† 2006

	Tes	Pos	itive	
Toxicology variable	No.	%	No.	%
Blood alcohol concentration (BAC)§	6,234	72.5	2,073	33.3
BAC ≤ 0.08 mg/dL			744	35.9
BAC >0.08 mg/dL			1,167	56.3
Alcohol-positive, level unknown			162	7.8
Amphetamine	3,767	43.8	149	4.0
Antidepressant	3,541	41.2	952	26.9
Cocaine	4,260	49.5	438	10.3
Marijuana	3,085	35.9	249	8.1
Opiate	4,287	49.9	820	19.1
Other drug(s)	3,801	44.2	1,837	48.3

\* N = 8,599.

<sup>†</sup> Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

§ BAC of >0.08 mg/dL used as standard for intoxication. Other substances indicated if any results were positive; levels for these substances are not measured

TABLE 7. Number\* and percentage† of suicides, by sex and associated circumstances — National Violent Death Reporting System. 16 states,§ 2006

	Ma	ile	Fen	nale	To	tal
Associated circumstances	No.	%	No.	%	No.	. %
Mental health/Substance abuse						
Current depressed mood	2,564	43.3	768	44.9	3,332	43.6
Current mental health problem	2,173	36.7	1,076	63.9	3,199	41.9
Current mental health treatment	1,633	27.5	874	51.1	2,507	32.8
Alcohol problem	1,124	19.0	253	14.8	1,377	18.0
Other substance abuse problem	877	14.8	302	17.7	1,179	15.4
Interpersonal						
Intimate-partner problem	1,951	32.9	452	26.4	2,403	31.5
Other relationship problem (nonintimate)	575	9.7	231	13.5	806	10.6
Suicide of family member or friend during previous 5 yrs	92	1.6	37	2.2	129	1.7
Other death of family member or friend during previous 5 yrs	367	6.2	115	6.7	482	6.3
Perpetrator of interpersonal violence during previous mo	373	6.3	18	1.1	391	5.1
Victim of interpersonal violence during previous mo	19	0.3	23	1.3	42	0.6
Life stressor						
Crisis during previous 2 wks	1,761	29.7	454	26.5	2,215	29.0
Physical health problem	1,295	21.8	388	22.7	1,683	22.0
Job problem	736	12.4	124	7.3	860	11.3
Recent criminal legal problem	688	11.6	68	4.0	756	9.9
Noncriminal legal problem	210	3.5	67	3.9	277	3.6
Financial problem	731	12.3	166	9.7	897	11.7
School problem	65	1.1	16	0.9	81	1.1
Suicide event						
Left a suicide note	1,854	31.3	666	38.9	2,520	33.0
Disclosed intent to commit suicide	1,735	29.3	476	27.8	2,211	29.0
History of suicide attempt(s)	899	15.2	589	34.4	1,488	19.5

\* N = 7,638 (5,928 males and 1,710 females). Circumstances were unknown for 961 deaths.

<sup>†</sup> Percentages might exceed 100% because multiple circumstances might have been coded. <sup>§</sup> Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

TABLE 8. Number\* and percentage† of suicide decedents who had received a diagnosis of a current mental health problem, by diagnosis — National Violent Death Reporting System, 16 states § 2006

Mental health problem	No.	%	
Depression/Dysthymia	2,408	75.3	
Bipolar disorder	430	13.4	
Anxiety disorder	247	7.7	
Schizophrenia	166	5.2	
PTSD <sup>1</sup>	45	1.4	
OCD**	12	0.4	
ADD/ADHD††	30	0.9	
Eating disorder	11	0.3	
Other	142	4.4	
Unknown	275	8.6	

\* N = 3,199.

† Percentages might exceed 100% because multiple diagnosis categories might have been coded.

<sup>5</sup> Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

Posttraumatic stress disorder.

\*\* Obsessive-compulsive disorder.

<sup>11</sup> Attention deficit disorder/attention deficit and hyperactivity disorder.

TABLE 9. Number,\* percentage,† and rate§ of homicides/legal-intervention deaths, by method used and month in which death occurred — National Violent Death Reporting System, 16 states.¶ 2006

Characteristic	No.	%	Rate
Method			
Firearm	2,857	65.8	3.6
Sharp instrument	526	12.1	0.7
Blunt instrument	199	4.6	0.3
Poisoning	27	0.6	0
Hanging/Strangulation/Suffocation	116	2.7	0.1
Personal weapons (hands, feet, or fists)	140	3.2	0.2
Fall	7	0.2	9.9
Drowning	6	0.1	**
Fire/Burns	17	0.4	**
Shaking	34	0.8	0
Motor vehicle††	32	0.7	0
Intentional neglect	5	0.1	2.9
Other (single method)	11	0.3	**
Firearm and other method type§§	53	1.2	0.1
Poisoning and other method type§§	12	0.3	**
Other combination of methods§§	148	3.4	0.2
Unknown	153	3.5	0.4
Total	4,343	100.0	5.5
Month			
January	389	9.0	0.5
February	254	5.8	0.3
March	316	7.3	0.4
April	330	7.6	0.4
May	363	8.4	0.5
June	361	8.3	0.5
July	411	9.5	0.5
August	352	8.1	0.4
September	388	8.9	0.5
October	400	9.2	0.5
November	381	8.8	0.5
December	388	8.9	0.5
Unknown	10	0.2	0.0
Total	4 343	100.0	5.5

\* No. of deaths = 4,335, including 4,177 victims, 8 homicide suspects who subsequently committed suicide and 166 suspects who were killed subsequently; no. of live suspects = 3,980; no. of incidents = 4,138.

† Percentages might not total 100% because of rounding.

§ Per 100,000 population.

<sup>1</sup> Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

\*\* Rates not reported when number of decedents is <20.

11 Includes bus, motorcycle, or other transport vehicle.

55 Deaths involving more than one method and for which evidence did not indicate which method caused the fatal injury.

TABLE 10. Number and percentage\* of homicides/legalintervention deaths, by victim's marital status and relationship to suspect — National Violent Death Reporting System, 16 states,† 2006

Characteristic	No.	%
Marital status§		
Married	906	23.3
Never married	2,026	52.1
Widowed	113	2.9
Divorced	500	12.9
Married but separated	23	0.6
Single, not otherwise specified	259	6.7
Unknown	64	1.6
Total	3,891	100.0
Relationship		
Spouse/Intimate partner (current or former)	443	10.2
Parent	86	2.0
Child	147	3.4
Other intimate-partner involvement®	46	1.1
Other relative	143	3.3
Acquaintance/Friend	683	15.7
Rival gang member	35	0.8
Stranger	320	7.4
Victim injured by a law enforcement officer	155	3.6
Other specified relationship	285	6.6
More than one relationship mentioned	114	2.6
Multiple suspects in incident	117	2.7
Relationship unknown/missing	1,769	40.7
Total	4,343	100.0

 Percentages might not total 100% because of rounding.
 Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin. § Includes only those victims aged >18 years.

Death attributed to intimate-partner-related violence but not between the intimate partners themselves (e.g., when a child is killed by the mother's partner).

TABLE 11. Number, percentage,\* and rate† of homicides/legal-intervention deaths, by victim's sex, age group, and race/ethnicity — National Violent Death Reporting System, 16 states,§ 2006

		Male			Female			Total	
Characteristic	No.	%	Rate	No.	%	Rate	No.	%	Rate
Age group (yrs)									
<1	52	1.5	9.4	37	4.0	7.0	89	2.0	8.2
1-4	57	1.7	2.6	35	3.7	1.7	92	2.1	2.1
5-9	19	0.6	1	18	1.9	1	37	0.9	0.7
10-14	39	1.1	1.4	12	1.3	1	51	1.2	1.0
15-19	397	11.6	13.9	68	7.3	2.5	465	10.7	8.4
20-24	696	20.4	24.4	97	10.4	3.7	793	18.3	14.4
25-29	515	15.1	18.5	102	10.9	3.8	617	14.2	11.2
30-34	401	11.8	15.1	97	10.4	3.7	498	11.5	9.5
35-44	589	17.3	10.0	180	19.3	3.0	769	17.7	6.5
45-54	365	10.7	6.4	148	15.8	2.5	513	11.8	4.4
55-64	189	5.5	4.6	70	7.5	1.6	259	6.0	3.1
65-74	56	1.6	2.5	28	3.0	1.1	84	1.9	1.7
75-84	25	0.7	1.9	26	2.8	1.3	51	1.2	1.6
>85	7	0.2	1	14	1.5	1	21	0.5	1.6
Unknown	2	0.1	1	2	0.2	1	4	0.1	1
Total	3,409	100.0	8.8	934	100.0	2.3	4,343	100.0	5.5
Race/Ethnicity									
White, non-Hispanic	962	28.2	3.5	453	48.5	1.6	1,415	32.6	2.5
Black, non-Hispanic	1,932	56.7	33.5	362	38.8	5.7	2,294	52.8	18.9
API**	52	1.5	3.7	21	2.2	1.4	73	1.7	2.6
AI/AN <sup>††</sup>	65	1.9	13.3	22	2.4	4.3	87	2.0	8.7
Hispanic <sup>§§</sup>	385	11.3	9.9	74	7.9	2.1	459	10.6	6.2
Other	10	0.3	9	2	0.2	1	12	0.3	1
Unknown	3	0.1	1	0	0	1	3	0.1	1
Total	3,409	100.0	8.8	934	100.0	2.3	4,343	100.0	5.5

\* Percentages might not total 100% because of rounding. † Per 100,000 population.

Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.
 Rates not reported when number of decedents is <20.</li>

\*\* Asian/Pacific Islander

11 American Indian/Alaska Native.

55 Includes persons of any race.

TABLE 12. Number and percentage\* of homicides/legal-intervention deaths, by victim's sex, method used, and location in which injury occurred — National Violent Death Reporting System, 16 states,† 2006

	Ma	ile	Fen	nale	To	tal
Method/Location	No.	%	No.	%	No.	%
Method						
Firearm	2,416	70.9	441	47.2	2.857	65.8
Sharp instrument	375	11.0	151	16.2	526	12.1
Blunt instrument	147	4.3	52	5.6	199	4.6
Poisoning	22	0.6	5	0.5	27	0.6
Hanging/Strangulation/Suffocation	41	1.2	75	8.0	116	2.7
Personal weapons (hands, feet, or fists)	102	3.0	38	4.1	140	3.2
Fall	5	0.1	2	0.2	7	0.2
Drowning	4	0.1	2	0.2	6	0.1
Fire/Burns	9	0.3	8	0.9	17	0.4
Shaking	19	0.6	15	1.6	34	0.8
Motor vehicle§	25	0.7	7	0.7	32	0.7
Intentional neglect	0	0	5	0.5	5	0.1
Other (single method)	7	0.2	4	0.4	11	0.3
Firearm and other method type®	39	1.1	14	1.5	53	1.2
Poisoning and other method type <sup>¶</sup>	7	0.2	5	0.5	12	0.3
Other combination of methods <sup>¶</sup>	84	2.5	64	6.9	148	3.4
Unknown	107	3.1	46	4.9	153	3.5
Total	3,409	100.0	934	100.0	4,343	100.0
Location						
House or apartment	1.537	45.1	684	73.2	2,221	51.1
Street/Highway	875	25.7	76	8.1	951	21.9
Motor vehicle	157	4.6	17	1.8	174	4.0
Bar/Nightclub	65	1.9	1	0.1	66	1.5
Commercial/Retail area	107	3.1	24	2.6	131	3.0
Industrial or construction area	14	0.4	2	0.2	16	0.4
Office building	16	0.5	2	0.2	18	0.4
Parking lot/Public garage	161	4.7	22	2.4	183	4.2
Abandoned house, building, or warehouse	12	0.4	3	0.3	15	0.3
Park, playground, or sports/athletic area	80	2.3	7	0.7	87	2.0
Preschool/School/College/School bus	3	0.1	2	0.2	5	0.1
Public transportation/Station/Railroad tracks	4	0.1	1	0.1	5	0.1
Hospital or medical facility	5	0.1	5	0.5	10	0.2
Supervised residential facility	18	0.5	5	0.5	23	0.5
Jail/Prison	21	0.6	0	0	21	0.5
Farm	2	0.1	2	0.2	4	0.1
Natural area	55	1.6	22	2.4	77	1.8
Hotel/Motel	33	1.0	6	0.6	39	0.9
Other	177	5.2	29	3.1	206	4.7
Unknown	67	2.0	24	2.6	91	2.
Total	3,409	100.0	934	100.0	4,343	100.0

\*Percentages might not total 100% because of rounding.

† Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

§ Includes bus, motorcycle, or other transport vehicle.

† Deaths involving more than one method and for which evidence did not indicate which method caused the fatal injury.

TABLE 13. Number\* and percentage of homicide/legal-intervention victims tested for alcohol and drugs whose results were positive, by toxicology variable — National Violent Death Reporting System, 16 states,† 2006

	Tes	ted	Pos	itive
Toxicology variable	No.	%	No.	%
Blood alcohol concentration (BAC) <sup>5</sup>	3,480	80.1	1,169	33.6
BAC ≤0.08 mg/dL			451	38.6
BAC >0.08 mg/dL			601	51.4
Alcohol-positive, level unknown			117	10.0
Amphetamine	2,327	53.6	125	5.4
Antidepressant	1,702	39.2	66	3.9
Cocaine	2,789	64.2	480	17.2
Marijuana	1,514	34.9	297	19.6
Opiates	2,514	57.9	205	8.2
Other drug(s)	1,944	44.8	413	21.2

\* N = 4.343.

† Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

§ BAC of >0.08 mg/dL used as standard for intoxication. Other substances indicated if any results were positive; levels for these substances are not measured.

TABLE 14. Number\* and percentage† of homicide/legal-intervention deaths, by associated circumstances and victim's sex — National Violent Death Reporting System, 16 states, \$2006

	M	ale	Fer	male	To	otal
Circumstance	No.	%	No.	%	No.	%
Precipitated by another crime	788	33.9	183	25.8	971	32.0
Crime in progress <sup>¶</sup>	625	79.3	142	77.6	767	79.0
Argument over money/property	191	8.2	39	5.5	230	7.6
Jealousy ("lovers' triangle")	96	4.1	41	5.8	137	4.5
Other argument, abuse, or conflict	998	43.0	192	27.1	1,190	39.3
Drug related	421	18.1	64	9.0	485	16.0
Justifiable self-defense/Law enforcement	227	9.8	7	1.0	234	7.7
Brawl	56	2.4	1	0.1	57	1.9
"Mercy killing"	1	0	5	0.7	6	0.2
Victim was a bystander	33	1.4	22	3.1	55	1.8
Victim was a police officer on duty	17	0.7	1	0.1	18	0.6
Victim was an intervener assisting a crime victim	12	0.5	0	0	12	0.4
Victim used a weapon	300	12.9	20	2.8	320	10.6
Intimate-partner violence-related	240	10.3	370	52.2	610	20.
Hate crime	6	0.3	0	0	6	0.2
Drive-by shooting	88	3.8	6	0.8	94	3.1
Random violence	32	1.4	8	1.1	40	1.3
Gang-related	131	5.6	5	0.7	136	4.5

\* N = 3,039 (2,322 males and 709 females). Circumstances were unknown for 1,304 deaths.

Percentages might exceed 100% because multiple circumstances might have been coded.

§ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

Denominator is only cases that were precipitated by another crime.

TABLE 15. Number and percentage\* of homicides/legal-intervention deaths precipitated by another crime in progress at the time of injury, by type of crime — National Violent Death Reporting System. 16 states † 2006

Crime type	No.	%
Robbery	359	37.0
Burglary	90	9.3
Assault/Homicide	237	24.4
Rape/Sexual assault	42	4.3
Motor-vehicle theft	39	4.0
Arson	9	0.9
Drug trade	77	7.9
Witness intimidation/elimination	5	0.5
Gambling	6	0.6
Other	64	6.6
Unknown	43	4.4

\* Percentages might exceed 100% because multiple crimes might have been coded.

† Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

TABLE 16. Number,\* percentage,† and rate§ of undetermined deaths,¶ by method used and month in which death occurred — National Violent Death Reporting System, 16 states, \*\* 2006

National Violent Death Reporting Sy	stem, 16	states,*	2006
Characteristic	No.	%	Rate
Method			
Firearm	47	2.0	0.1
Sharp instrument	5	0.2	11
Blunt instrument	33	1.4	0
Poisoning	1,533	65.7	1.9
Hanging/Strangulation/Suffocation	35	1.5	0
Personal weapons (hands, feet, or fists)	2	0.1	11
Fall	42	1.8	0.1
Drowning	56	2.4	0.1
Fire/Burns	15	0.6	11
Shaking	1	0	11
Motor vehicle§§	28	1.2	0
Intentional neglect	1	0	11
Other (single method)	115	4.9	0.1
Firearm and other method type 15	1	0	11
Poisoning and other method type <sup>11</sup>	26	1.1	0
Other combination of methods <sup>¶</sup>	7	0.3	11
Unknown	385	16.5	0.5
Total	2,332	100.0	3.0
Month			
January	207	8.9	0.3
February	172	7.4	0.2
March	216	9.3	0.3
April	199	8.5	0.3
May	183	7.8	0.2
June	162	6.9	0.2
July	195	8.4	0.2
August	207	8.9	0.3
September	175	7.5	0.2
October	189	8.1	0.2
November	204	8.7	0.3
December	220	9.4	0.3
Unknown	3	0.1	11
Total	2.332	100.0	3.0

No. incidents = 2,323; no. of victims = 2,332; no. of homicide suspects who subsequently committed suicide = 0; no. of live suspects = 25.

Percentages might not total 100% because of rounding.

Per 100,000 population.

Deaths that result from the use of force or power against oneself or another person for which evidence indicating one manner of death was no more compelling than evidence indicating another.

\*\* Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

11 Rates not reported when number of decedents is <20.

§§ Includes bus, motorcycle, or other transport vehicle.

Deaths involving more than one method and for which evidence did not indicate which method caused the fatal injury.

TABLE 17. Number, percentage\* and rate<sup>†</sup> of undetermined deaths, by victim's sex, age group, race/ethnicity, and marital status National Violent Death Reporting System, 16 states, 1 2006

		Male			Female			Total	
Characteristic	No.	%	Rate	No.	%	Rate	No.	%	Rate
Age group (yrs)									
<1	107	7.3	19.4	109	12.6	20.7	216	9.3	20.0
1-4	16	1.1	**	23	2.7	1.1	39	1.7	0.9
5-9	4	0.3	**	3	0.3	**	7	0.3	9.9
10-14	6	0.4	**	3	0.3	**	9	0.4	**
15-19	48	3.3	1.7	19	2.2	8.0	67	2.9	1.2
20-24	134	9.1	4.7	38	4.4	1.4	172	7.4	3.1
25-29	121	8.2	4.3	48	5.6	1.8	169	7.2	3.1
30-34	112	7.6	4.2	54	6.3	2.1	166	7.1	3.2
35-44	346	23.6	5.9	214	24.8	3.6	560	24.0	4.8
45-54	384	26.2	6.8	231	26.7	3.9	615	26.4	5.3
55-64	142	9.7	3.5	83	9.6	1.9	225	9.6	2.7
65-74	29	2.0	1.3	23	2.7	0.9	52	2.2	1.1
75-84	17	1.2	0.0	10	1.2		27	1.2	0.8
>85	2	0.1	**	4	0.5	**	6	0.3	**
Unknown	0	0	9.9	2	0.2	0.0	2	0.1	**
Total	1,468	100.0	3.8	864	100.0	2.2	2,332	100.0	3.0
Race/Ethnicity									
White, non-Hispanic	1,026	69.9	3.8	641	74.2	2.3	1,667	71.5	3.0
Black, non-Hispanic	302	20.6	5.2	146	16.9	2.3	448	19.2	3.7
APITT	15	1.0	**	4	0.5	**	19	0.8	**
AI/AN <sup>§§</sup>	34	2.3	6.9	20	2.3	3.9	54	2.3	5.4
Hispanic 11	89	6.1	2.3	51	5.9	1.5	140	6.0	1.9
Other	2	0.1	**	2	0.2	9.0	4	0.2	**
Total	1,468	100.0	3.8	864	100.0	2.2	2,332	100.0	3.0
Marital status***									
Married	306	23.3	111	255	35.5	111	561	27.6	111
Never married	605	46.0	111	193	26.9	111	798	39.3	111
Widowed	27	2.1	111	46	6.4	111	73	3.6	111
Divorced	306	23.3	111	202	28.1	111	508	25.0	111
Married but separated	9	0.7	111	4	0.6	111	13	0.6	111
Single, not otherwise specified	19	1.4	111	9	1.3	111	28	1.4	111
Unknown	43	3.3	111	9	1.3	111	52	2.6	111
Total	1,315	100.0	111	718	100.0	111	2,033	100.0	111

Percentages might not total 100% because of rounding.
 Per 100,000 population.

9 Deaths that result from the use of force or power against oneself or another person for which evidence indicating one manner of death was no more compelling than evidence indicating another.

Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

\*\* Rate not reported when number of decedents is <20.

<sup>††</sup> Asian/Pacific Islander.

55 American Indian/Alaska Native.

11 Includes persons of all races.

\*\*\* Includes only those decedents aged >18 years.

111 Rates cannot be computed for marital status because denominators are unknown.

TABLE 18. Number and percentage\* of undetermined deaths,† by decedent's sex, method used, and location in which injury occurred — National Violent Death Reporting System, 16 states, 5 2006

	M	ale	Fer	male	Total	
Characteristic	No.	96	No.	%	No.	%
Method						
Firearm	38	2.6	9	1.0	47	2.0
Sharp instrument	3	0.2	2	0.2	5	0.2
Blunt instrument	20	1.4	13	1.5	33	1.4
Poisoning	955	65.1	578	66.9	1,533	65.7
Hanging/Strangulation/Suffocation	27	1.8	8	0.9	35	1.5
Personal weapons (hands, feet, or fists)	2	0.1	0	0	2	0.1
Fall	27	1.8	15	1.7	42	1.8
Drowning	46	3.1	10	1.2	56	2.4
Fire/Burns	14	1.0	1	0.1	15	0.6
Shaking	1	0.1	0	0	1	0
Motor vehicle¶	20	1.4	8	0.9	28	1.2
Intentional neglect	0	0	1	0.1	1	0
Other (single method)	59	4.0	56	6.5	115	4.9
Firearm and other method type**	0	0	1	0.1	1	0
Poisoning and other method type**	16	1.1	10	1.2	26	1.1
Other combination of methods**	6	0.4	1	0.1	7	0.3
Unknown	234	15.9	151	17.5	385	16.5
Total	1,468	100.0	864	100.0	2,332	100.0
ocation						
House or apartment	1,063	72.4	705	81.6	1,768	75.8
Street/Highway	66	4.5	28	3.2	94	4.0
Motor vehicle	13	0.9	10	1.2	23	1.0
Bar/Nightclub	2	0.1	0	0	2	0.1
Commercial/Retail area	4	0.3	2	0.2	6	0.3
Industrial or construction area	3	0.2	0	0	3	0.1
Office building	3	0.2	0	0	3	0.1
Parking lot/Public garage	7	0.5	2	0.2	9	0.4
Abandoned house, building, or warehouse	3	0.2	2	0.2	5	0.2
Park, playground, or sports/athletic area	14	1.0	4	0.5	18	3.0
Preschool/School/College/School bus	0	0	1	0.1	1	0.0
Public transportation/Station/Railroad tracks	7	0.5	0	0	7	0.3
Hospital or medical facility	7	0.5	7	0.8	14	0.6
Supervised residential facility	27	1.8	7	0.8	34	1.5
Jail/prison	10	0.7	0	0.0	10	0.4
Farm	1	0.1	3	0.3	4	0.2
Natural area	74	5.0	14	1.6	88	3.8
Hotel/Motel	31	2.1	14	1.6	45	1.9
Other	70	4.8	20	2.3	90	3.9
Unknown	63	4.3	45	5.2	108	4.6
Total	1,468	100.0	864	100.0	2,332	100.0

\* Percentages might not total 100% because of rounding.

† Deaths that resulted from the use of force or power against oneself or another person for which evidence indicating one manner of death was no more compelling than evidence indicating another.

§ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

1 Includes bus, motorcycle, or other transport vehicle.

\*\* Deaths involving more than one method and for which injury evidence did not indicate which method caused the fatal injury.

TABLE 19. Number\* and percentage of victims of undetermined intent† tested for alcohol and drugs whose results were positive, by toxicology variable — National Violent Death Reporting System, 16 states,§ 2006

Toxicology variable	Te	Tested		
	No.	%	No.	%
Blood alcohol concentration (BAC) <sup>1</sup>	1,938	83.1	516	26.6
BAC <0.08 mg/dL			228	44.2
BAC >0.08 mg/dL			262	50.8
Alcohol-positive, level unknown			26	5.0
Amphetamine	1,754	75.2	92	5.3
Antidepressant	1,656	71.0	466	28.1
Cocaine	1,865	80.0	481	25.8
Marijuana	926	39.7	110	11.9
Opiate	1,916	82.2	1,122	58.6
Other drug(s)	1,850	79.3	1,010	54.6

\* N = 2.332.

<sup>†</sup> Deaths that resulted from the use of force or power against oneself or another person for which evidence indicating one manner of death was no more compelling than evidence indicating another.

§ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

\*BAC of >0.08 mg/dL used as standard for intoxication. Other substances indicated if any results were positive; levels for these substances are not measured.

TABLE 20. Number\* and percentage<sup>†</sup> of deaths of undetermined intent, by victim's sex and associated circumstances — National Violent Death Reporting System, 16 states, 2006

	M	ale	Fen	nale	То	tal
Characteristic	No.	%	No.	%	No.	%
Mental health/Substance abuse						
Current depressed mood	119	11.4	107	17.6	226	13.7
Current mental health problem	251	24.0	290	47.6	541	32.7
Current mental health treatment	192	18.3	226	37.1	418	25.2
Alcohol problem	328	31.3	108	17.7	436	26.3
Other substance abuse problem	679	64.9	322	52.9	1,001	60.5
Interpersonal						
Intimate-partner problem	88	8.4	73	12.0	161	9.7
Other relationship problem (nonintimate)	43	4.1	40	6.6	83	5.0
Suicide of family member or friend during previous 5 yrs	5	0.5	7	1.1	12	0.7
Other death of family member or friend during previous 5 yrs	26	2.5	23	3.8	49	3.0
Perpetrator of interpersonal violence during previous mo	7	0.7	3	0.5	10	0.6
Victim of interpersonal violence during previous mo	7	0.7	14	2.3	21	1.3
Life stressor						
Crisis in past 2 wks	132	12.6	107	17.6	230	14.4
Physical health problem	295	28.2	236	38.8	531	32.1
Job problem	46	4.4	18	3.0	64	3.9
Recent criminal legal problem	53	5.1	23	3.8	76	4.6
Noncriminal legal problem	12	1.1	5	0.8	17	1.0
Financial problem	31	3.0	15	2.5	46	2.8
School problem	6	0.6	2	0.3	8	0.5
Suicide event						
Left a suicide note	16	1.5	15	2.5	31	1.9
Disclosed intent to commit suicide	57	5.4	51	8.4	108	6.5
History of suicide attempt(s)	75	7.2	77	12.6	152	9.2

° N = 1,615 (1,047 males and 609 females). Circumstances were unknown for 717 deaths.

† Percentages might exceed 100% because multiple circumstances might have been coded.

§ Deaths that result from the use of force or power against oneself or another person for which evidence indicating one manner of death was no more compelling than evidence indicating another.

<sup>1</sup> Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

TABLE 21. Number\* and percentage† of victims of undetermined intent5 who had received a diagnosis of a current mental health problem, by diagnosis — National Violent Death Reporting System, 16 states, 1 2006

Mental health problem	No.	%	
Depression/Dysthymia	309	57.1	
Bipolar disorder	110	20.3	
Anxiety disorder	61	11.3	
Schizophrenia	43	7.9	
PTSD**	10	1.8	
OCD††	0	0	
ADD/ADHD <sup>§§</sup>	2	0.4	
Eating disorder	3	0.6	
Other	24	4.4	
Unknown	31	5.7	

\* N = 541

† Percentages might exceed 100% because two or more diagnosis categories per person might have been coded.

§ Deaths that result from the use of force or power against oneself or another person for which evidence indicating one manner of death was no more compelling than evidence indicating another.

Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

\*\* Posttraumatic stress disorder.

<sup>††</sup> Obsessive-compulsive disorder.

§§ Attention deficit disorder/hyperactivity disorder.

TABLE 22. Number\* and percentage† of unintentional firearm deaths, by victim's sex, race/ethnicity, age group, month in which the death occurred, and location in which injury occurred — National Violent Death Reporting System, 16 states,§ 2006

Characteristic	No.	%
Sex		
Male	86	85.1
Female	15	14.9
Total	101	100.0
Race/Ethnicity		
White, non-Hispanic	75	74.3
Black, non-Hispanic	15	14.9
API <sup>¶</sup>	1	1.0
AI/AN**	4	4.0
Hispanic <sup>††</sup>	6	5.9
Total	101	100.0
Age group (yrs)		
<1	0	0
1-4	4	4.0
5-9	7	6.9
10-14	6	5.9
15-19	23	22.8
20-24	12	11.9
25-29	11	10.9
30-34	4	4.0
35-44	12	11.9
45-54	10	9.9
55-64	6	5.9
65-74	2	2.0
75-84	3	3.0
≥85	1	1.0
Total	101	100.0

TABLE 22. (Continued) Number\* and percentage† of unintentional firearm deaths, by victim's sex, race/ethnicity, age group, month in which the death occurred, and location in which injury occurred — National Violent Death Reporting System, 16 states, § 2006

Characteristic	No.	%
Month		
January	11	10.9
February	5	5.0
March	8	7.9
April	7	6.9
May	4	4.0
June	10	9.9
July	7	6.9
August	7	6.9
September	3	3.0
October	10	9.9
November	18	17.8
December	10	9.9
Unknown	1	1.0
Total	101	100.0
Location		
House or apartment	74	73.3
Street/Highway	3	3.0
Commercial/Retail area	2	2.0
Parking lot/Public garage	1	1.0
Natural area	8	7.9
Other <sup>§§</sup>	8	7.9
Unknown	5	5.0
Total	101	100.0

\* No. incidents = 101; no. decedents = 101; no. of live suspects = 46.

Percentages might not total 100% because of rounding.

§ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

Asian/Pacific Islander.

\*\* American Indian/Alaska Native.

<sup>††</sup> Includes persons of any race.

§§ Includes military training exercise, private land campsites, and private hunting land attached to homes.

TABLE 23. Number\* and percentage† of unintentional firearm deaths, by context and circumstances of injury — National Violent Death Reporting System. 16 states.§ 2006

Circumstances	No.	%	
Context of injury			
Hunting	11	13.3	
Target shooting	2	2.4	
Celebratory firing	0	0	
Loading/unloading gun	11	13.3	
Cleaning gun	8	9.6	
Showing gun to others	13	15.7	
Playing with gun	27	32.5	
Other context of injury	23	27.7	
Circumstances of injury			
Thought safety was engaged	0	0	
Thought unloaded, magazine disengaged	9	10.8	
Thought gun was unloaded, other	21	25.3	
Unintentionally pulled trigger	16	19.3	
Bullet ricochet	1	1.2	
Gun defect or malfunction	2	2.4	
Fired while holstering/unholstering	1	1.2	
Dropped gun	9	10.8	
Fired while operating safety/lock	2	2.4	
Gun mistaken for toy	2	2.4	
Other mechanism of injury	24	28.9	

\* N = 83. Circumstances were unknown for 18 deaths.

† Percentages might exceed 100% because multiiple circumstances might have been coded.

§ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

TABLE 24. Number\* and percentage<sup>†</sup> of incidents involving multiple violent deaths, by incident type and method used — National Violent Death Reporting System, 16 states § 2006

Characteristic	No.	%	
Incident type			
Multiple suicides	6	1.8	
Multiple homicides	140	42.3	
Legal intervention	1	0.3	
Homicide followed by suicide	166	50.2	
Other combinations of deaths	11	3.3	
Undetermined	7	2.1	
Total	331	100.0	
Method			
Firearm	538	74.8	
Sharp instrument	36	5.0	
Blunt instrument	6	0.8	
Poisoning	21	2.9	
Hanging/Strangulation/Suffocation	19	2.6	
Drowning	2	0.3	
Fire/Burns	5	0.7	
Motor vehicle®	2	0.3	
Firearm and other method type"*	33	4.6	
Poisoning and other method type**	8	1.1	
Other combination of methods**	45	6.3	
Unknown	4	0.6	
Total	719	100.0	

No. of decedents = 719 (includes 166 homicide suspects who subsequently killed themselves); no. of suspects = 355; no. of incidents = 331.

† Percentages might not total 100% because of rounding.

§ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

Includes bus, motorcycle, or other transport vehicle.

 Deaths involving more than one method and for which evidence did not indicate which method caused the fatal injury.

TABLE 25. Number, percentage,\* and rate\* of violent death incidents involving multiple victims, by victim's sex, race/ethnicity, and age group - National Violent Death Reporting System, 16 states,§ 2006

		Victims			pects®
Characteristic	No.	%	Rate	No.	%
Sex					
Male	453	63.0	1.2	325	91.6
Female	266	37.0	0.7	16	4.5
Unknown	0	0	0.0	14	4.0
Total	719	100.0	0.9	355	100.0
Race/Ethnicity					
White, non-Hispanic	363	50.5	0.7	138	38.9
Black, non-Hispanic	268	37.3	2.2	140	39.4
APITT	28	3.9	1.0	10	2.8
AI/AN§§	14	1.9	**	5	1.4
Hispanic <sup>¶</sup>	45	6.3	0.6	29	8.2
Other	0	0	9.9	28	7.9
Unknown	1	0.1	**	5	1.4
Total	719	100.0	0.9	355	100.0
Age group (yrs)					
<1	8	1.1	0.9	0	0
1-4	20	2.8	0.5	0	0
5-9	25	3.5	0.5	0	0
10-14	15	2.1	0.0	2	0.6
15-19	45	6.3	0.8	24	6.8
20-24	111	15.4	2.0	65	18.3
25-29	75	10.4	1.4	39	11.0
30-34	63	8.8	1.2	22	6.2
35-44	132	18.4	1.1	60	16.9
45-54	111	15.4	1.0	48	13.5
55-64	58	8.1	0.7	21	5.9
65-74	31	4.3	0.6	11	3.1
75-84	16	2.2	***	5	1.4
≥85	8	1.1	49	4	1.1
Unknown	1	0.1	**	54	15.2
Total	719	100.0	0.9	355	100.0

<sup>\*</sup> Percentages might not total 100% because of rounding. † Per 100,000 population.

Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.
 Number of suspects includes 166 homicide suspects who subsequently committed suicide. Rates cannot be

computed for suspects because the number of suspects involved in an incident was not always known.

<sup>\*\*</sup> Rates not reported when number of decedents is <20.

<sup>11</sup> Asian/Pacific Islander.

<sup>§§</sup> American Indian/Alaska Native.

Includes persons of any race.

TABLE 26. Number,\* percentage,† and rate§ of deaths involving a homicide followed by a suicide, by victim's sex, race/ethnicity, age group, and marital status — National Violent Death Reporting System, 16 states,¶ 2006

		Homicide			Suicide	
	No.	%	Rate	No.	%	Rate
Sex						
Male	53	27.3	0.1	157	94.6	0.4
Female	141	72.7	0.4	9	5.4	**
Total	194	100.0	0.2	166	100.0	0.2
Race/Ethnicity						
White, non-Hispanic	129	66.5	0.2	98	59.0	0.2
Black, non-Hispanic	39	20.1	0.3	40	24.1	0.3
APITT	10	5.2	4.4	10	6.0	**
Al/ANSS	7	3.6	**	3	1.8	**
Hispanic	9	4.6	**	15	9.0	**
Total	194	100.0	0.2	166	100.0	0.2
Age group (yrs)						
<1	2	1.0	0.0	0	0	0.0
1-4	7	3.6	**	0	0	0.0
5-9	10	5.2	**	0	0	**
10-14	7	3.6	**	0	0	**
15-19	7	3.6	**	1	6.0	**
20-24	27	13.9	0.5	20	12.0	0.4
25-29	18	9.3	**	12	7.2	9.0
30-34	14	7.2	**	11	6.6	9.9
35-44	38	19.6	0.3	41	24.7	0.3
45-54	26	13.4	0.2	44	26.5	0.4
55-64	16	8.2	99	18	10.8	**
65-74	9	4.6	**	11	6.6	**
75-84	8	4.1	**	5	3.0	**
≥85	4	2.1	**	3	1.8	9.9
Unknown	1	0.5	**	0	0	**
Total	194	100.0	0.2	166	100.0	0.2
Marital status***						
Married	78	47.9	111	54	32.5	111
Never married	38	23.3	111	32	19.3	111
Widowed	13	8.0	111	37	22.3	111
Divorced	24	14.7	111	32	19.3	111
Married but separated	3	1.8	111	3	1.8	111
Single, not otherwise specified	6	3.7	111	5	3.0	111
Unknown	1	0.6	111	3	1.8	111
Total	163	100.0	111	166	100.0	111

\* No. incidents = 166.

† Percentages might not total 100% because of rounding.

<sup>5</sup> Per 100,000 population.

Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

\*\* Rates not reported when number of decedents is <20.

†† Asian/Pacific Islander.

55 American Indian/Alaska Native.

11 Includes persons of any race.

\*\*\* Includes only decedents aged >18 years.

111 Rates for marital status cannot be computed because denominators are unknown.

TABLE 27. Number and percentage\* of homicides followed by suicide, by location in which injury occurred and method used — National Violent Death Reporting System, 16 states,† 2006

	Hom	nicide	Suid	cide
Characteristic	No.	%	No.	%
Location				
House or apartment	161	83.0	127	76.5
Street/Highway	4	2.1	5	3.0
Motor vehicle <sup>§</sup>	3	1.5	5	3.0
Bar/Nightclub	1	0.5	1	0.6
Commercial/Retail area	3	1.5	3	1.8
Industrial or construction area	1	0.5	1	0.6
Office building	2	1.0	1	0.6
Parking lot/Public garage	4	2.1	3	1.8
Park, playground, or sports/athletic area	2	1.0	3	1.8
Preschool/School/College/School bus	1	0.5	1	0.6
Hospital or medical facility	1	0.5	2	1.2
Farm	1	0.5	2	1.2
Natural area	5	2.6	4	2.4
Hotel/Motel	0	0	2	1.2
Other	3	1.5	5	3.0
Unknown	2	1.0	1	0.6
Total	194	100.0	166	100.0
Method				
Firearm	159	82.0	136	81.9
Sharp instrument	3	1.5	3	1.8
Poisoning	3	1.5	2	1.2
Hanging/Strangulation/Suffocation	5	2.6	5	3.0
Firearm and other method type®	11	5.7	7	4.2
Poisoning and other method type <sup>¶</sup>	1	0.5	1	0.6
Other combination of methods <sup>¶</sup>	12	6.2	12	7.2
Total	194	100.0	166	100.0

\* Percentages might not total 100% because of rounding.

<sup>†</sup> Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

§ Includes bus, motorcycle, or other transport vehicle.

Deaths involving more than one method and for which evidence did not indicate which method caused the fatal injury.

TABLE 28. Number\* and percentage of homicides followed by suicide, by toxicology variable — National Violent Death Reporting System, 16 states,† 2006

	Homicide				Suicide			
Toxicology variable	Tested		Positive		Tested		Positive	
	No.	%	No.	%	No.	%	No.	%
Blood alcohol concentration (BAC)§	149	76.8	15	10.7	133	80.1	36	27.1
BAC ≤0.08 mg/dL			10	66.7			16	44.4
BAC >0.08 mg/dL			4	26.7			15	41.7
Alcohol-positive, level unknown			1	6.7			5	13.9
Amphetamine	83	42.8	2	2.4	78	47.0	1	1.3
Antidepressant	68	35.1	4	5.9	64	38.6	7	10.9
Cocaine	103	53.1	7	6.8	96	57.8	11	11.5
Marijuana	61	31.4	6	9.8	56	33.7	10	17.9
Opiate	94	48.5	6	6.4	84	50.6	8	9.5
Other drug(s)	77	39.7	27	35.1	67	40.4	19	28.4

\*No. of homicide victims = 194; no. of suicide victims = 166.

†Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

§BAC of >0.08 mg/dL used as standard for intoxication. Other substances indicated if any results were positive; levels for these substances are not measured.

TABLE 29. Number\* and percentage† of homicide suspects who killed themselves after committing a homicide, by suicide circumstances — National Violent Death Reporting

Circumstance	No.	%
Mental health/Substance abuse		
Current depressed mood	20	12.3
Current mental health problem	7	4.3
Current mental health treatment	5	3.1
Alcohol problem	5	3.1
Other substance abuse problem	8	4.9
Interpersonal		
Intimate-partner problem	119	73.0
Other relationship problem (nonintimate)	29	17.8
Suicide of family member or friend during previous 5 yrs	0	0
Other death of family member or friend during previous 5 yrs	0	0
Perpetrator of interpersonal violence during previous mo	125	76.7
Victim of interpersonal violence during previous mo	1	0.6
Life stressor		
Crisis during previous 2 wks	143	87.7
Physical health problem	8	4.9
Job problem	8	4.9
Recent criminal legal problem	33	20.3
Noncriminal legal problem	5	3.1
Financial problem	15	9.2
School problem	0	0
Suicide event		
Left a suicide note	26	16.0
Disclosed intent to commit suicide	19	11.7
History of suicide attempt(s)	5	3.1

\*N = 163. Circumstances were unknown for three deaths.

† Percentages might exceed 100% because multiple circumstances might have been coded.

§ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

TABLE 30. Number,\* percentage,† and rate§ of deaths related to violence by intimate partners, by victim's and suspect's sex, race/ethnicity, age group, and marital status — National Violent Death Reporting System, 16 states,¶ 2006

		Victim		Suspect**		
Characteristic	No	%	Rate	No	%	
Sex						
Male	246	39.9	0.6	454	77.9	
Female	370	60.1	0.9	114	19.6	
Unknown	0	0	11	15	2.6	
Total	616	100.0	0.8	583	100.0	
Race/Ethnicity						
White, non-Hispanic	314	51.0	0.6	217	37.2	
Black, non-Hispanic	221	35.9	1.8	203	34.8	
API§§	13	2.1	11	9	1.5	
AI/ANTT	23	3.7	2.3	17	2.9	
Hispanic***	44	7.1	0.6	53	9.1	
Other	1	0.2	11	81	13.9	
Unknown	0	0.2	tt	3	0.5	
Total	616	100.0	0.8	583	100.0	
Age group (yrs)	010	100.0	0.0	300	100.0	
<1 <1	1	0.2	11	^	0	
1-4	8	1.3	tt	0	0	
5-9	9	1.5	11	0	0	
10-14	8	1.3	11	0	0	
15–19	26	4.2	0.5	23	4.0	
20–24	65	10.6	1.2	46	7.9	
25–29	78	12.7	1.4	61	10.5	
30–34	84	13.6	1.6	57	9.8	
35–44	165	26.8	1.4	144	24.7	
45-54	111	18.0	1.0	94	16.1	
55–64	35	5.7	0.4	33	5.7	
65–74	12	1.9	11	11	1.9	
75–84	11	1.8	††	6	1.0	
>85	3	0.5	11	3	0.5	
Unknown	0	0.5	11	105	18.0	
Total	616	100.0	0.8	583	100.0	
	010	100.0	0.0	303	100.0	
Marital status†††	050	40.0	566	555	151	
Married	253	43.8	999	111	111	
Never married	168	29.1	599 595	1111	1111	
Widowed	24	4.2		755	177	
Divorced	105	18.2	555 555	111	1111	
Married but separated	8	1.4		111	1177	
Single, not otherwise specified	15	2.6	<b>5</b> 99	111	1111	
Unknown	5	0.9				
Total	578	100.0	555	नतता	100	

\* No. of incidents = 559. Number of male victims is six more than number reported in Table 14 because their manner of death was undetermined.

† Percentages might not total 100% because of rounding.

9 Per 100,000 population.

Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

\*\* Rates cannot be calculated for suspects because the number of suspects involved in an incident is not always known.

11 Rates not reported when number of decedents is <20.

§§ Asian/Pacific Islander.

M American Indian/Alaska Native.

\*\*\* Includes persons of any race.

ttt Includes only those decedents aged >18 years.

§§§ Rates for marital status cannot be computed because denominators are unknown.

1111 Data not available.

TABLE 31. Number\* and percentage of deaths by intimate partner violence, by toxicology variable — National Violent Death Reporting System, 16 states,† 2006

	Tes	sted	Positive	
Toxicology variable	No.	%	No.	%
Blood alcohol concentration (BAC)§	489	79.4	147	30.1
BAC <0.08 mg/dL			53	36.1
BAC >0.08 mg/dL			88	59.9
Alcohol-positive, level unknown			6	4.1
Amphetamine	284	46.1	9	3.2
Antidepressant	215	34.9	16	7.4
Cocaine	346	56.2	45	13.0
Marijuana	211	34.3	27	12.8
Opiate	316	51.3	18	5.7
Other drug(s)	233	37.8	60	25.8

" N = 616.

† Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

§ BAC of >0.08 mg/dL used as standard for intoxication. Other substances indicated if any results were positive; levels for these substances are not measured.

TABLE 32. Number\* and percentage† of suicides among former or current military personnel, by sex, race/ethnicity, age group, marital status, and method used — National Violent Death Reporting System. 16 states.§ 2006

Characteristic	No.	%
Sex		
Male	1,547	96.9
Female	49	3.1
Total	1,596	100.0
Race/Ethnicity		
White, non-Hispanic	1.451	90.9
Black, non-Hispanic	96	6.0
API <sup>¶</sup>	5	0.3
Al/AN**	11	0.7
Hispanic <sup>††</sup>	33	2.1
Total	1,596	100.0
Age group (yrs)		
≤19	10	0.6
20-24	55	3.4
25-29	42	2.6
30-34	54	3.4
35-44	203	12.7
45-54	307	19.2
55-64	334	20.9
65–74	247	15.5
75–84	249	15.6
≥85	95	6.0
Total	1,596	100.0
Marital status <sup>55</sup>		
Married	751	47.1
Never married	228	14.3
Widowed	194	12.2
Divorced	390	24.4
Married but separated	10	0.6
Single, not otherwise specified	17	1.1
Unknown	6	0.4
Total	1,596	100.0

TABLE 32. (Continued) Number\* and percentage† of suicides among former or current military personnel, by sex, age group, race/ethnicity, marital status, and method used — National Violent Death Reporting System, 16 states,§ 2006

Characteristic	No.	%
Method		
Firearm	1,097	68.7
Sharp instrument	28	1.8
Blunt instrument	3	0.2
Poisoning	191	12.0
Hanging/Strangulation/Suffocation	208	13.0
Fall	19	1.2
Drowning	17	1.1
Fire/Burns	1	0.1
Motor vehicle <sup>¶¶</sup>	8	0.5
Other (single method)	2	0.1
Firearm and poisoning***	1	0.1
Firearm and other method type***	2	0.1
Poisoning and other method type***	3	0.2
Other combination of methods***	6	0.4
Unknown	10	0.6
Total	1,596	100.0

\* No. of incidents = 1,596.

† Percentages might not total 100% because of rounding.

§ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

Asian/Pacific Islander.

\*\* American Indian/Alaska Native.

†† Includes persons of any race.

§§ Includes only those decedents aged >18 years.

Includes only those decedents aged > 18 years.

Includes bus, motorcycle, or other transport vehicle

\*\*\* Deaths involving more than one method and for which evidence did not indicate which method caused the fatal injury.

TABLE 33. Number\* and percentage of suicides by former or current military personnel, by toxicology variable — National Violent Death Reporting System, 16 states,† 2006

	Te	sted	Positive	
Toxicology variable	No.	%	No.	%
Blood alcohol concentration				
(BAC) <sup>§</sup>	1,105	69.2	337	30.5
BAC ≤0.08 mg/dL			117	34.7
BAC >0.08 mg/dL			203	60.2
Alcohol-positive, level unkno	wn		17	5.0
Amphetamine	564	35.3	23	4.1
Antidepressant	547	34.3	116	21.2
Cocaine	627	39.3	39	6.2
Marijuana	456	28.6	25	5.5
Opiate	648	40.6	116	17.9
Other drug(s)	588	36.8	247	42.0

\* N = 1,596.

Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

§ BAC of >0.08 mg/dL used as standard for intoxication. Other substances indicated if any results were positive; levels for these substances are not measured.

TABLE 34. Number\* and percentage† of suicides among former or current military personnel, by associated circumstances — National Violent Death Reporting System. 16 states. § 2006

Circumstance	No.	%	
Mental health/Substance abuse			
Current depressed mood	679	46.9	
Current mental health problem	529	36.6	
Current mental health treatment	410	28.3	
Alcohol problem	231	16.0	
Other substance abuse problem	106	7.3	
Interpersonal			
Intimate-partner problem	360	24.9	
Other relationship problem (nonintimate)	114	7.9	
Suicide of family member or friend during previous 5 yrs	16	1.1	
Other death of family member or friend during previous 5 yrs	109	7.5	
Perpetrator of interpersonal violence during previous mo	73	5.0	
Victim of interpersonal violence during previous mo	1	0.1	
Life stressor			
Crisis during previous 2 wks	402	27.8	
Physical health problem	574	39.7	
Job problem	150	10.4	
Recent criminal legal problem	109	7.5	
Financial problem	179	12.4	
Noncriminal legal problem	50	3.5	
School problem	2	0.1	
Suicide event			
Left a suicide note	529	36.6	
Disclosed intent to commit suicide	397	27.4	
History of suicide attempt(s)	187	12.9	

\* N = 1,447. Circumstances were unknown for 149 deaths.

† Percentages may exceed 100% because multiple circumstances might have been coded.

Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

TABLE 35. Number\* and percentage† of deaths caused by legal intervention, by victim's race/ethnicity, marital status, and location where injury occurred — National Violent Death Reporting System, 16 states,§ 2006

Characteristic	No.	%
Race/Ethnicity		
White, non-Hispanic	88	50.6
Black, non-Hispanic	61	35.1
API <sup>§</sup>	2	1.1
AI/AN**	2	1.1
Hispanic <sup>††</sup>	21	12.1
Total	174	100.0
Marital status <sup>§§</sup>		
Married	50	29.4
Never married	68	40.0
Widowed	1	0.6
Divorced	27	15.9
Married but separated	1	0.6
Single, not otherwise specified	19	11.2
Unknown	4	2.4
Total	170	100.0
Location of injury		
House or apartment	78	44.8
Street/Highway	42	24.1
Motor vehicle 19	6	3.4
Bar/Nightclub	1	0.6
Commercial/Retail area	10	5.7
Industrial or construction area	1	0.6
Office building	2	1.1
Parking lot/Public garage	11	6.3
Park, playground, or sports/athletic area	4	2.3
Jail/Prison	5	2.9
Natural area	1	0.6
Hotel/Motel	4	2.3
Other	9	5.2
Total	174	100.0

No. incidents = 173; no. victim decedents = 168; no. suspect decedents = 6. No. of incidents is 7 more than the number provided in Table 1 because 7 "other combinations of death" included at least one legal intervention death.

† Percentages might not total 100% due to rounding.

§ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

Asian/Pacific Islander.

\*\* American Indian/Alaska Native.

<sup>††</sup> Includes persons of any race.

55 Includes only those victims aged >18 years.

Includes bus, motorcycle, or other transport vehicle.

TABLE 36. Number and percentage\* of deaths caused by legal intervention, by sex and age group — National Violent Death Reporting System. 16 states.† 2006

	M	lale	Fe	male	To	otal
Characteristic	No.	%	No.	%	No.	%
Age group (yrs)						
<1	0	0	0	0	0	0
1-4	0	0	0	0	0	0
5-9	0	0	0	0	0	0
10-14	1	0.6	0	0	1	0.6
15-19	14	8.4	0	0	14	8.0
20-24	23	13.8	1	14.3	24	13.8
25-29	20	12.0	0	0	20	11.5
30-34	24	14.4	2	28.6	26	14.9
35-44	45	26.9	1	14.3	46	26.4
45-54	33	19.8	2	28.6	35	20.1
55-64	4	2.4	0	0	4	2.3
65-74	2	1.2	0	0	2	1.1
75-84	1	0.6	0	0	1	0.6
≥85	0	0	1	14.3	1	0.6
Total	167	100.0	7	100.0	174	100.0

\* Percentages might not total 100% because of rounding.

<sup>†</sup> Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

Table 37. Number\* and percentage of deaths caused by legal intervention, by toxicology variable — National Violent Death Reporting System, 16 states,† 2006

	Tested		Positive	
Toxicology variable	No.	%	No.	%
Blood alcohol concentration (BAC) <sup>§</sup>	150	86.2	58	38.7
BAC ≤0.08 mg/dL			22	37.9
BAC >0.08 mg/dL			36	62.1
Amphetamine	105	60.3	12	11.4
Antidepressant	67	38.5	9	13.4
Cocaine	126	72.4	33	26.2
Marijuana	82	47.1	15	18.3
Opiate	120	69.0	11	9.2
Other drug(s)	102	58.6	33	32.4

\* N = 174.

† Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

§ BAC of >0.08 mg/dL used as standard for intoxication. Other substances indicated if any results were positive; levels for these substances are not measured.

TABLE 38. Number,\* percentage,† and rate§ of suicides among persons aged >50 years, by age group, sex, race/ethnicity, marital status, location of injury, and method — National Violent Death Reporting System, 16 states,¶ 2006

	Age group (yrs)														
Characteristic	50-59		60-69		70-79			≥80			Total				
	No.	%	Rate	No.	%	Rate	No.	%	Rate	No.	%	Rate	No.	%	Rate
Number of Incidents								3,300							
Sex															
Male	1,223	73.8	24.2	608	77.7	20.5	408	84.8	23.3	326	86.2	35.5	2,565	77.7	24.0
Female	435	26.2	8.1	175	22.4	5.3	73	15.2	3.2	52	13.8	3.0	735	22.3	5.8
Total	1,658	100.0	16.0	783	100.0	12.5	481	100.0	11.9	378	100.0	14.1	3.300	100.0	14.1
Race/Ethnicity													-,		
White, non-Hispanic	1.518	91.6	18.8	716	91.4	14.1	448	93.1	13.3	365	96.6	15.8	3,047	92.3	16.2
Black, non-Hispanic	62	3.7	4.5	35	4.5	4.9	15	3.1	**	5	1.3	13.0	117	3.5	4.3
A/PI <sup>††</sup>	24	1.4	7.9	9	1.1	**	9	1.9	**	5	1.3	0.0	47	1.4	8.0
AI/AN§§	15	0.9	22	7	0.9	**	3	0.6	**	0	0	9.0	25	0.8	11.3
Hispanic <sup>11</sup>	38	2.3	7.1	14	1.8	**	6	1.2	**	3	0.8	**	61	1.8	5.9
Other	1	0.1	9.0	2	0.3	**	0	0	9.9	0	0.0	9.9	3	0.1	3.3
Total	1.658	100.0	16.0	783	100.0	12.5	481	100.0	11.9	378	100.0	14.1	3,300	100.0	14.1
	1,030	100.0	10.0	103	100.0	12.5	401	100.0	11.9	3/0	100.0	14.1	3,300	100.0	14.1
Marital status															
Never married	192	11.6	***	61	7.8	***	31	6.4	***	13	3.4	000	297	9.0	***
Married	741	44.7	***	397	50.7	***	248	51.6	900	167	44.2	999	1,553	47.1	***
Widowed	81	4.9	999	75	9.6	***	108	22.5	0.00	172	45.5	***	436	13.2	***
Divorced	599	36.1	249	231	29.5	***	93	19.3	***	23	6.1	***	946	28.7	***
Married but separated	15	0.9	***	3	0.4	000	1	0.2	900	0	0	***	19	0.6	***
Single, not otherwise															
specified	16	1.0	***	6	0.8	***	0	0	***	0	0	***	22	0.7	941
Unknown	14	8.0	***	10	1.3	***	0	0	***	3	0.8	***	27	0.8	***
Total	1,658	100.0	***	783	100.0	***	481	100.0	***	378	100.0	***	3,300	100.0	***
Location															
House or apartment	1.258	75.9	12.1	629	80.3	10.0	410	85.2	10.2	331	87.6	12.3	2,628	79.6	11.2
Street/Highway	51	3.1	0.5	17	2.2	6.6	6	1.2	9.9	4	1.1	0.0	78	2.4	0.3
Motor vehicle	57	3.4	0.5	17	2.2	**	7	1.5	0.0	4	1.1	0.0	85	2.6	0.4
Bar/Nightclub	1	0.1	**	0	0	**	0	0	**	0	0	0.0	1	0	**
Commercial/Retail area	8	0.5	**	3	0.4	9.9	2	0.4	0.9	1	0.3		14	0.4	0.0
Industrial or construction		0.0			0.1		_	0.4		,	0.0			0.4	
area	11	0.7	**	4	0.5	**	0	0	**	1	0.3		16	0.5	44
Office building	6	0.4	**	8	1.0	9.9	1	0.2	**	0	0	**	15	0.5	44
Parking lot/Public garage	13	0.8	**	10	1.3	**	4	0.8	**	3	0.8		30	0.9	0.1
Abandoned house, building,	10	0.0		10			-,	0.0		0	0.0		00	0.0	0.1
or warehouse	3	0.2	**	0	0	**	0	0	0.0	0	0	0.0	3	0.1	94
Park, playground, or sports/															
athletic area	23	1.4	0.2	10	1.3	**	4	0.8		6	1.6	9.0	43	1.3	0.2
Preschool/School/College/															
School bus	1	0.1	9.9	0	0	9.9	0	0	9.9	0	0	2.0	1	0	44
Public transportation/Station/															
Railroad tracks	8	0.5	**	2	0.3	**	0	0	9.0	1	0.3	**	11	0.3	**
Hospital or medical facility	6	0.4	9.9	2	0.3	**	3	0.6	9.9	7	1.9	9.9	18	0.5	0.5
Supervised residential facility	/ 3	0.2	0.0	2	0.3	9.9	2	0.4	9.0	5	1.3	0.0	12	0.4	**
Jail/Prison	9	0.5	0.0	2	0.3	9.9	0	0	9.9	0	0	0.0	11	0.3	9.9
Farm	10	0.6	0.0	6	0.8	**	1	0.2		1	0.3	**	18	0.5	
Natural area	70	4.2	0.7	30	3.8	0.5	18	3.7	0.0	4	1.1	0.0	122	3.7	0.5
Hotel/Motel	48	2.9	0.5	8	1.0	0.0	4	0.8	4.0	0	0	0.0	60	1.8	0.3
Other	51	3.1	0.5	24	3.1	0.4	16	3.3	**	5	1.3		96	2.9	0.4
Unknown	21	1.3	0.3	9	1.1	0.4	3	0.6	**	5	1.3	2.0	38	1.2	0.4
						40.5			44.5			44.0			
Total	1,658	100.0	16.0	783	100.0	12.5	481	100.0	11.9	378	100.0	14.1	3,300	100.0	14.1

TABLE 38. (Continued) Number,\* percentage,† and rate§ of suicides among persons aged >50 years, by age group, sex, race/ ethnicity, marital status, location of injury, and method — National Violent Death Reporting System, 16 states,¶ 2006

Characteristic	Age group (yrs)														
	50-59			60-69			70-79			≥80			Total		
	No.	%	Rate	No.	%	Rate	No.	%	Rate	No.	%	Rate	No.	%	Rate
Number of Incidents								3,300							
Method															
Firearm	885	53.4	8.5	497	63.5	7.9	363	75.5	9.0	271	71.7	10.1	2,016	61.1	8.6
Sharp instrument	36	2.2	0.3	22	2.8	0.4	9	1.9	**	8	2.1	0.0	75	2.3	0.3
Blunt instrument	2	0.1	**	1	0.1	**	1	0.2	**	0	0	**	4	0.1	**
Poisoning	404	24.4	3.9	123	15.7	2.0	40	8.3	1.0	35	9.3	1.3	602	18.2	2.6
Hanging/Strangulation/															
Suffocation	227	13.7	2.2	88	11.2	1.4	41	8.5	1.0	46	12.2	1.7	402	12.2	1.7
Fall	27	1.6	0.3	10	1.3	6.0	7	1.5	0.5	6	1.6	4.6	50	1.5	0.2
Drowning	25	1.5	0.2	14	1.8	4.9	10	2.1	**	5	1.3	**	54	1.6	0.2
Fire/Burns	6	0.4	**	7	0.9	**	1	0.2		0	0	**	14	0.4	**
Motor vehicle	9	0.5	**	5	0.6	**	1	0.2	**	3	0.8	**	18	0.5	**
Other (single method)	7	0.4	**	1	0.1	**	1	0.2	**	0	0	**	9	0.3	**
Firearm and poisoning <sup>†††</sup>	0	0	**	1	0.1	**	0	0	**	0	0	**	1	0	**
Firearm and other method type <sup>†††</sup>	1	0.1	**	1	0.1	**	0	0	**	0	0	**	2	0.1	**
Poisoning and other method type <sup>†††</sup>	7	0.4	0.0	4	0.5	**	0	0	**	1	0.3	**	12	0.4	**
Other combination of methods <sup>†††</sup>	6	0.4	**	1	0.1	**	2	0.4	**	1	0.3	**	10	0.3	**
Unknown	16	1.0	9:9	8	1.0	de de	5	1.0	**	2	0.5	**	31	0.9	0.1
Total	1,658	100.0	16.0	783	100.0	12.5	481	100.0	11.9	378	100.0	14.1	3,300	100.0	14.1

\* No. incidents = 3,297; no. decedents = 3,300.

† Percentages might not total 100% because of rounding

§ Per 100,000 population.

Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

" Rates not reported when number of decedents was <20.

<sup>††</sup> Asian/Pacific Islander.

§§ American Indian/Alaska Native.

11 Includes persons of any race.

\*\*\* Rates for marital status cannot be computed because denominators are unknown.

111 Deaths involving more than one method and for which evidence did not indicate which method caused the fatal injury.

TABLE 39. Number\* and percentage† of suicides among persons aged >50 years, by age group and associated circumstances — National Violent Death Reporting System, 16 states,§ 2006

					Age gro	up (yrs)				
	50-59		60-69		70-79		≥80		To	tal
Associated circumstances		%	No.	%	No.	%	No.	%	No.	%
Mental health/Substance abuse										
Current depressed mood	684	23.3	311	10.6	191	6.5	161	5.5	1,347	45.8
Current mental health problem	701	23.9	297	10.1	146	5.0	82	2.8	1,226	41.7
Current mental health treatment	578	19.7	228	7.8	108	3.7	61	2.1	975	33.2
Alcohol problem	324	11.0	95	3.2	24	0.8	8	0.3	451	15.4
Other substance abuse problem	168	5.7	26	0.9	4	0.1	1	0	199	6.8
Interpersonal										
Intimate-partner problem	380	13.0	99	3.4	42	1.4	14	0.5	535	18.2
Other relationship problem (nonintimate)	136	4.6	39	1.3	19	0.7	11	0.4	205	7.0
Suicide of family member or friend during previous 5 yrs	16	0.5	15	0.5	2	0.1	3	0.1	36	1.2
Other death of family member or friend during previous 5 yrs	101	3.4	53	1.8	43	1.5	45	1.5	242	8.2
Perpetrator of interpersonal violence during previous mo	69	2.4	15	0.5	13	0.4	6	0.2	103	3.5
Victim of interpersonal violence duirng previous mo	3	0.1	1	0	0	0	1	0	5	0.2
Life stressor										
Crisis during previus 2 wks	368	12.5	158	5.4	95	3.2	74	2.5	695	23.7
Physical health problem	377	12.8	284	9.7	275	9.4	244	8.3	1,180	40.2
Job problem	230	7.8	46	1.6	6	0.2	1	0	283	9.6
Recent criminal legal problem	117	4.0	30	1.0	11	0.4	0	0	158	5.4
Noncriminal legal problem	48	1.6	14	0.5	4	0.1	1	0	67	2.3
Financial problem	235	8.0	86	2.9	25	0.9	7	0.2	353	12.0
School Problem	1	0	0	0	0	0	0	0	1	0
Suicide event										
Left a suicide note	552	18.8	249	8.5	141	4.8	115	3.9	1,057	36.0
Disclosed intent to commit suicide	388	13.2	172	5.9	124	4.2	95	3.2	779	26.5
History of suicide attempt(s)	298	10.1	102	3.5	28	1.0	18	0.6	446	15.2

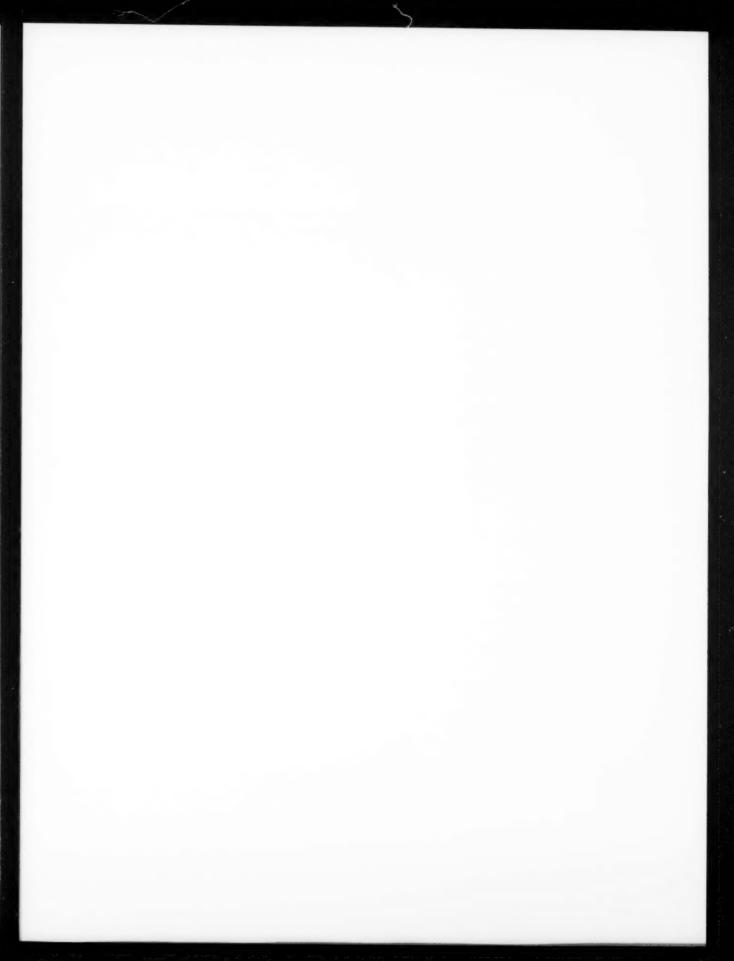
\* N = 2,939. Circumstances were unknown for 361 deaths.

† Percentages might exceed 100% because multiple circumstances might have been coded.

§ Alaska, Colorado, Georgia, Kentucky, Maryland, Massachusetts, New Jersey, New Mexico, North Carolina, Oklahoma, Oregon, Rhode Island, South Carolina, Utah, Virginia, and Wisconsin.

## National Violent Death Reporting System State Coordinators Membership List as of June 30, 2008

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